

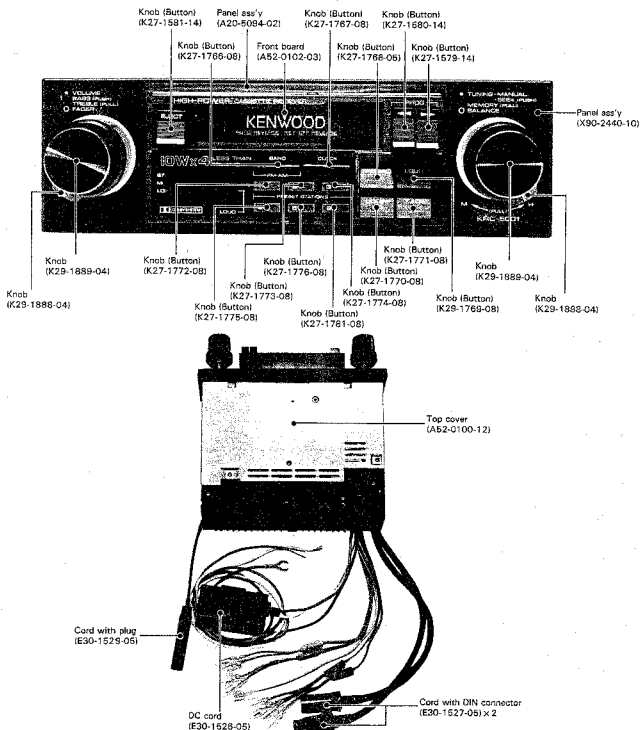
HIGH-POWER CASSETTE RECEIVER

# KRC-5001

## SERVICE MANUAL

# KENWOOD

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B51-3139-00(T)952

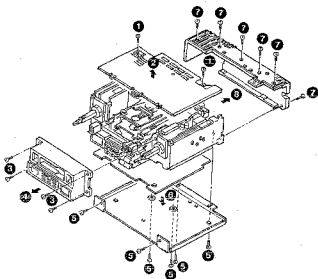


\* Refer to Parts List on page 35.

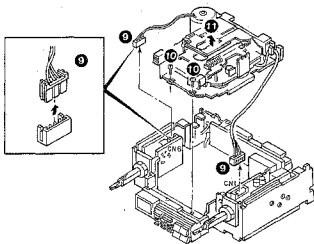
# KRC-5001

## DISASSEMBLY FOR REPAIR

1. Remove 2 screws **1** retaining the top cover.
2. Remove the top cover in the direction of arrow **2**.
3. Remove 4 screws **3** retaining the front cover.
4. Remove the front cover in the direction of arrow **4**.
5. Remove 6 screws **5** retaining the bottom plate.
6. Remove the bottom plate in the direction of arrow **6**.
7. Remove 6 screws **7** retaining the head sink.
8. Remove the heat sink in the direction of arrow **8**.

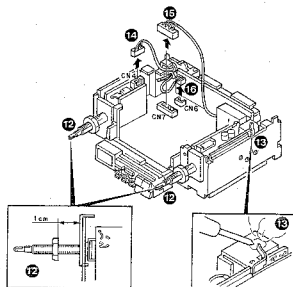


1. Disconnect connectors CN1 and CN6 **9**.
2. Remove 2 screws **10** retaining the mechanism block.
3. Remove the mechanism block in the direction of arrow **11**.

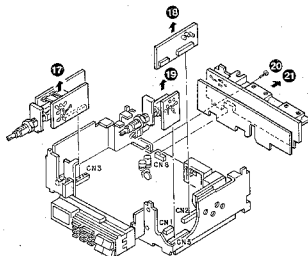


## DISASSEMBLY FOR REPAIR

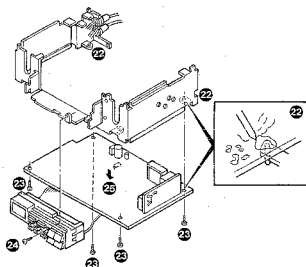
1. Loosen 2 nuts **12** retaining the right and left variable resistors by 1 cm.
2. Remove the solder as shown in **15**.
3. Disconnect connectors CN4 **14**, CN7 **15** and CN6 **16**.



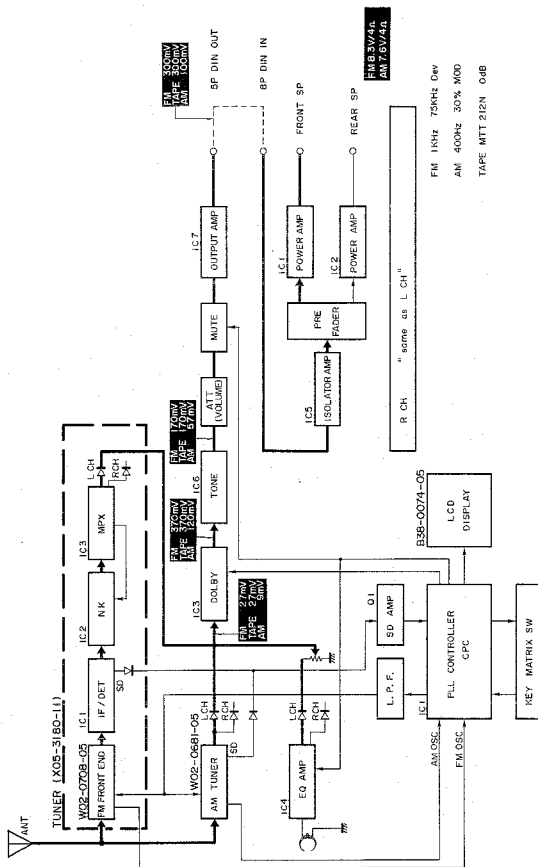
1. Remove right variable resistor **17**.
2. Remove PC board in the direction of arrow **18**.
3. Remove left variable resistor **19**.
4. Remove screw **20** retaining the PC board.
5. Remove the PC board in the direction of arrow **21**.



1. Remove solder from 2 portions **22**.
2. Remove 4 screws **23** retaining the bottom PC board.
3. Remove screw **24** retaining the switch block.
4. Remove the bottom PC board in the direction of arrow **25**.



### BLOCK & LEVEL DIAGRAM





## CIRCUIT DESCRIPTION

## Description of Components

## TUNER UNIT (X05-3180-11)

Component	Use & Function	Operation, Condition & Compatibility
IC1	FM IF Detection	
IC2	Noise Canceller	
IC3	MPX	
Q1	LOCAL/DX SW	
Q2, 3	IF Gain	
Q5	ANRC Buff.	
Q6	CRSC Driver	

## CONTROL UNIT (X11-2340-10)

Component	Use & Function	Operation, Condition & Compatibility
IC1, 2	Power amp	
IC3	DOLBY B	Hitachi HA120476 H-IC.
IC4	TAPE EQ	MET switch, MUTE circuit built-in.
IC5	T.ADV	For blank detection.
IC6	STONE	Tone control H-IC.
IC7	PRE OUT AMP	D IN OUT.
Q1	T.ADV PL driver	
Q2	T.ADV SW	
Q3, 4	LOUDNESS SW	
Q5, 6	POWER IC standby SW	

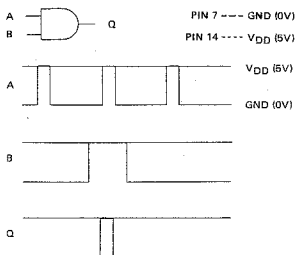
## SYNTHESIZER UNIT (X14-2010-10)

Component	Use & Function	Operation, Condition & Compatibility
IC1	Microprocessor	
IC2	T.CALL control	T.CALL, T.ADV, DOLBY and MUTE control.
IC3	Key input control	FWD/REV, ST lamp and SD T/R switch.
IC4	Key matrix	UP/DOWN, MEMORY and SEEK input switch.
IC5	Isolation amp	For power amp input.
Q1	SD signal inverter	ON when SD is present.
Q2	MET SW	OFF for MET ON.
Q3	TAPE muting	Muting for TAPE EQ IC.
Q4	Muting driver	
Q5	T.ADV SW	ON for T.ADV.
Q6	FM + B SW	ON for FM.
Q7	AM + B SW	ON for AM.
Q8, 9	Radio switch	AM/FM/TAPE switching.
Q10, 11	Regulator	Regulated power supply for 9 V line.
Q12	Chip Enable	Microprocessor operation ON/OFF.
Q13	AVR	Vop 5 V power supply.
Q14, 15	LPF	
Q16	LPF gain SW	ON for FM.
Q17, 18, 20	Muting	Signal line muting.
Q19	TAPE mode SW	ON for TAPE mode.
Q21, 22	Power control	For standby of POWER IC.



## CIRCUIT DESCRIPTION

### AND-GATE For CPU Key Matrix Operation Description



### CPU Key Matrix Operation

The source clock from the CPU is input to A-input via the AND-GATE at any time to apply the control signal to B-input.

When the signal is input to B-input, the output Q goes high and input as the CPU key input. When the B-input is low level, output Q is always low. Output Q is synchronized with input A.

### Synthesizer Unit $\mu$ -Com: $\mu$ PD 1708G

#### FUNCTION OUTLINE

Receiving frequency, Channel spacing, Reference frequency, Intermediate frequency

#### FM band

Frequency range	Channel spacing	Reference frequency	Intermediate frequency
87.50 ~ 108.0 MHz	* 50 kHz	12.5 kHz	10,700

\* MANUAL 25 kHz

#### AM band

Frequency range	Channel spacing	Reference frequency	Intermediate frequency
522 ~ 1611 kHz	9 kHz	9 kHz	450 kHz
153 ~ 281 kHz	* 9 kHz	1 kHz	450 kHz

\* MANUAL 1 kHz

#### Tuning Function

- Auto Tuning (Sawtooth wave mode)  
Seek Up: Once a station is tuned, it is held tuned.
- Manual Tuning (Sawtooth wave mode)  
Manual Up/Down: Frequency is advanced up or down in steps by pressing the push switch.  
Pressing for a half second or more advances it up or down continuously until the switch is released.
- Preset Memory Recall  
6 stations on each FM, MW, and LW band can be preset independently with the 6 buttons. The last station is stored in memory for each band when power is turned off.

#### Tape Function

- Tape running indicator
- METAL control

#### Radio Function

- MONO control

#### Other Functions

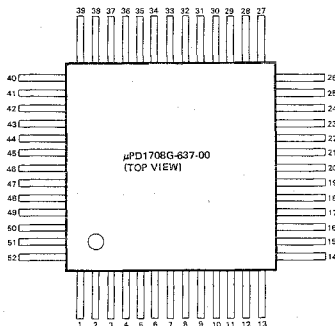
- LOUDNESS control



## CIRCUIT DESCRIPTION

## TERMINAL DESCRIPTION

Terminal Configuration (Top View)



Pin No.	Pin Name	Pin No.	Pin Name
1	LCD4	27	KS <sub>1</sub> (PB <sub>1</sub> )
2	LCD3	28	KS <sub>2</sub> (PB <sub>2</sub> )
3	LCD2	29	BANDZ/N.R.
4	LCD1	30	METAL-LOC
5	COM2	31	LOUDNESS
6	COM1	32	*
7	V <sub>DD</sub>	33	*
8	FM	34	*
9	AM	35	*
10	GND	36	*
11	EO <sub>1</sub>	37	*
12	EO <sub>2</sub>	38	LCD19
13	CE	39	LCD18
14	*	40	LCD17
15	XI	41	LCD16
16	XO	42	LCD15
17	AF MUTE (PA <sub>2</sub> )	43	LCD14
18	BAND 1 (PA <sub>2</sub> )	44	LCD13
19	KS <sub>2</sub> /K <sub>1</sub> (PA <sub>1</sub> )	45	LCD12
20	KS <sub>2</sub> /K <sub>1</sub> (PA <sub>1</sub> )	46	LCD11
21	K <sub>2</sub>	47	LCD10
22	K <sub>2</sub>	48	LCD9
23	K <sub>1</sub>	49	LCD8
24	K <sub>0</sub>	50	LCD7
25	KS <sub>2</sub> (PB <sub>2</sub> )	51	LCD6
26	KS <sub>1</sub> (PB <sub>1</sub> )	52	LCD5

\* Not used.

## CIRCUIT DESCRIPTION

Pin description

Pin No.	Symbol	Pin Name	Description
1~4 34~52	LCD1 LCD23	LCD segment signal	LCD segment signal output pin (1/2 duty, 1/2 bias LCD should be used. Frame frequency: 100 Hz, Drive voltage: VDD)
5 6	COM2 COM1	LCD common signal	LCD common signal output pin
7 33	V <sub>DD</sub>	Power input	Device power supply pins During device operation, 5 V $\pm$ 10% voltage is supplied via these pins. Either of them can be used for supplying the power individually. The rising time of VDD should be less than 500 ms (0 to 4.5 V). When the rising time is too long, or when the VDD is not lowered completely to 0 V and then raised to 4.5 V from the voltage lower than the operating rate, the diode switch condition for initialization is not read out correctly. In such cases, use the CE pin so that the diode switch status can be read out for initialization.
8	FM	FM VCO input	This pin inputs the FM station output signal. Since it incorporates the AC amp, cut the DC signal with the capacitor.
9	AM	AM VCO input	This pin inputs the AM station output signal. Since it incorporates the AC amp, cut the DC signal with the capacitor.
10	GND	Ground	Connect to the ground terminal of the set.
11	EO <sub>1</sub>	Error Out	Charge pump output of the phase detector consisting of PLL. When the frequency divided by the oscillating frequency is higher than the reference frequency, these pins output high level signals, and when it is lower than the reference frequency, they go low. When the frequency (divided by the oscillating frequency) is coincided with the reference frequency, it enters into the floating status.
13	CE	Chip Enable	This pin is used to input the selected signal from the device. When operating the PLL section, this pin goes high, and when the PLL section is stopped, it goes low. When at low level, the display goes off. However, a low level signal below 134 $\mu$ s or high level signal is not accepted.
15 16	XI XO	Crystal resonator	Connectors of the crystal resonator. Connect the 4.5 MHz crystal resonator.
17	AF MUTE	Mute Out	This pin outputs the muting signal to eliminate shock noise when the PLL is unlocked and pop noise when switching between Tape and Radio, and is active low. (CMOS output) For timing details, refer to the AF Mute Out Timing Chart. When the CE pin is low, this pin is active low.
18	BAND <sub>1</sub>	Band Out	FM/MW switching output pin FM: High MW: Low When the MODE switch is set to "1" (Tape mode), this pin is low. When the SDK is provided, follow the SDK section.
19	KS <sub>2</sub> /K <sub>s</sub>	Key return signal source and Key return signal input	This becomes the source of key return signal to read out the diode matrix for initialization only when the power is turned on for the first time (rising time of VDD) or when the set is returned from the back-up condition (CE: Low to High). Then, this inputs the key return signal for the key matrix. Insert the pull-down resistor. (CMOS input/output)
20	KS <sub>2</sub> /K <sub>s</sub>	Key return signal source and Key return signal input	This becomes the source of the key return signal to read out the diode matrix for initialization only when the power is turned on for the first time (rising time of VDD) or when returning from the back-up condition (CE goes high from low). Then, this inputs the key return signal for the key matrix. Insert the pull-down resistor. (CMOS input/output)
21 24	K <sub>1</sub> K <sub>2</sub>	Key return signal input	This pin inputs the key return signal for the key matrix. Insert the pull-down resistor. (CMOS input)
25 28	KS <sub>1</sub> KS <sub>2</sub>	Key return signal source	This pin outputs the key return signal for the key matrix. Since the synchronous current is greatly lowered because of its configuration, the reverse-current prevention diode will be not necessary for the key source side. (CMOS output)
30	METAL/DX/LOC	LOC Out	In radio mode: DX/Local On/Off output pin When "LOC" is displayed on the LCD panel, high level signal is output. When it is not lit, low level signal is output. (When the power is turned on, low level status is initialized.) In tape mode: METAL On/Off output pin When "METAL" is displayed on the LCD panel, low level signal is output. When it is not lit, high level signal is output. On initialization when the tape power is turned on, high level is output.

## CIRCUIT DESCRIPTION

Pin No.	Symbol	Pin Name	Description
31	LOUDNESS	Loudness Out	LOUDNESS output pin When "LOUD" is displayed on the LCD panel, low level signal is output. When it is not lit, high level signal is output. When the power is turned on first (VDD rising time), low level signal is output. (CMOS output)
32			DOLBY output pin. When "DOLBY" is displayed on the LCD panel, high level signal is output. When it is not lit, low level signal is output. On initialization when the power is turned on, low level is output.

## BAND2/NR

When Band A is "0" or "1" and the NR selector is "1", this functions as the NR on/off output pin. When "NR" is displayed on the LCD panel, high level signal is output. When it is not lit, low level signal is output.

This pin can be operated in the TAPE/RADIO mode.

On initialization when the power is turned on, this pin is at low level.

When BAND A is "0", "1" and the NR selector is "0", this function as the WIDE-ADV on/off output pin.

- In the Radio mode:**

This functions as the WIDE on/off output pin.

When "WIDE" is displayed on the LCD panel, high level signal is output, and when it is not lit, low level is output.

- In the Tape mode:**

This functions as the ADV on/off output pin.

When "ADV" is displayed on the LCD panel, high level signal is output, while it is not lit, low level is output.

On initialization when the power is turned on first, it is at low level.

When BAND A is "0" and the NR selector is "0" (SDK operation is normal only when in this status), and BAND B is "1", this pin functions as the BAND 2 output. BAND 2 becomes the band switching output port in combination with BAND 1.

Mode	Output	BAND 1	BAND 2
MW		L	L
FM		H	L
LW		L	H
SDK		H	H

## CIRCUIT DESCRIPTION

### 1. KEY MATRIX CONFIGURATION

#### 1-1. Key Matrix Layout

Input pin \ Output pin	K <sub>3</sub> (19)	K <sub>4</sub> (20)	K <sub>5</sub> (21)	K <sub>6</sub> (22)	K <sub>1</sub> (23)	K <sub>2</sub> (24)
KS <sub>3</sub> (28)	SEEK DOWN	SEEK UP		LOUDNESS	MTL	MONO
KS <sub>1</sub> (27)	MD	MU	M4	M3	M2	M1
KS <sub>2</sub> (26)	ME	SDK	M6	M5		BAND
KS <sub>4</sub> (25)		SK	MODE	SD	ST	POW/REV
KS <sub>6</sub> (20)			CLK/PRO	NR SEL	BAND B	
KS <sub>5</sub> (19)			BAND A	PRIORITY	BAND C	CLKSEL

The number in the bracket shows the pin no.



: Momentary switch



: Diode matrix (closed/opened by diode)

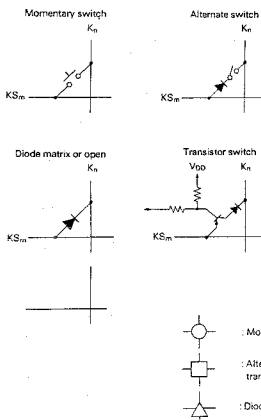


: Alternate switch or transistor switch

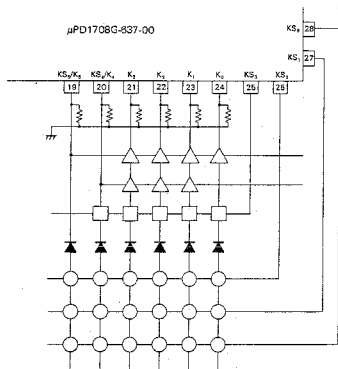


: Open

#### 1-2. Switch Connection



#### 1-3. Key Matrix Connection



## CIRCUIT DESCRIPTION

## 2. KEY MATRIX DESCRIPTION

## 2-1. Diode Matrix for Initialization

The diode matrix for initialization has the following five status. All status is read out only when the power is supplied to the V<sub>DD</sub> for the first time (Power-ON, Reset) and when the CE pin goes high from low level (CE Reset), in another periods, the diode matrix status is ignored.

- (1) The switch for setting the receiving frequency range and the channel spacing:

BAND A

- (2) Clock signal select switch:

CLKSEL

- (3) Priority select switch for display:

PRIORITY

- (4) —

- (5) NR select switch:

NR SEL

- (6) CLOCK/FREQUENCY select switch:

CLOCK/FREQ

- (7) LW select switch:

BAND B

Symbol	Function Description																				
BAND A	<p>This switch is used for setting the receiving frequency range for each FM/MW/LW band channel spacing. Each setting status is as follows:</p> <table><tr><th>BAND A</th><th>Frequency Range</th><th>Channel Spacing</th><th>Manual Step</th></tr><tr><td>1</td><td>87.9~107.9 MHz</td><td>200 kHz</td><td>—</td></tr><tr><td>1</td><td>530~1620 kHz</td><td>10 kHz</td><td>—</td></tr><tr><td>0</td><td>87.5~108.0 MHz</td><td>50 kHz</td><td>25 kHz</td></tr><tr><td>0</td><td>522~1611 kHz</td><td>9 kHz</td><td>—</td></tr></table>	BAND A	Frequency Range	Channel Spacing	Manual Step	1	87.9~107.9 MHz	200 kHz	—	1	530~1620 kHz	10 kHz	—	0	87.5~108.0 MHz	50 kHz	25 kHz	0	522~1611 kHz	9 kHz	—
BAND A	Frequency Range	Channel Spacing	Manual Step																		
1	87.9~107.9 MHz	200 kHz	—																		
1	530~1620 kHz	10 kHz	—																		
0	87.5~108.0 MHz	50 kHz	25 kHz																		
0	522~1611 kHz	9 kHz	—																		
PRIORITY	<p>When the clock function is provided, this switch selects the priority mode for display. When the display which does not have priority is recalled, the mode having priority will be displayed after approx. 5 seconds. "1": No priority "0": Priority is provided.</p>																				
CLKSEL	<p>Select switch to provide the clock function or not. "1": Clock is not provided (For back-up, RAM is not cleared) "0": Clock is provided.</p>																				
NR SEL	<p>Select switch to provide the NR (noise reduction) function. "0": NR is not provided (WIDE-ADV and BAND 2 output pin) "1": NR provided</p>																				
CLOCK/FREQ	<p>Select switch to provide priority to the clock or frequency for display (Depending on PRIORITY) "0": Frequency "1": Clock</p>																				
BAND C	<p>Switch to access the preset memory (M1 to M6) sequentially "0": M1 to M6 keys are preset independently "1": Each time the M1 key is pressed, preset memory is sent sequentially</p> <div><div>→</div><div>M<sub>1</sub>-----M<sub>6</sub></div><div>→</div></div>																				

## CIRCUIT DESCRIPTION

### 2-2. Mode Select Switches

Unlike the initializing switches, these switches can be changed at any times. (On the following table, "1" shows switched ON, "0" shows switched OFF.)

Symbol	Function Description
MODE	Set the unit to RADIO mode or TAPE mode. "1": TAPE mode "0": RADIO mode
SD	In the RADIO mode: This is the Station Detector input in SEEK or SCAN mode. This should be set to OFF within approx. 50 ms after the PLL is locked. When every times are OFF by detecting the station every 1 ms, the station is recognized as received and the seeking or scanning operation stops.
STEREO	In the RADIO mode: (Only for FM reception) Stereo signal input switch. When this switch turns OFF, "ST" is displayed on the LCD panel. However, "ST" goes off in the Auto Tuning mode (AF-MUTE pin is active) even if this switch is OFF.
FOR/REV	In the Tape mode: Tape running direction indicator input switch. When this switch turns ON, the "REV" (◀) is displayed on the LCD panel. When it turns OFF, the "FORW" (▶) is displayed. This switch functions only when the CE pin is high and the MODE switch is "ON" (Tape mode).

### 2-3. Momentary Switches

Symbol	Function Description																																																					
MU MD	<p>These keys are used for manual tuning and time adjustment.</p> <ul style="list-style-type: none"><li>● Frequency display Each time the key is pressed, the displayed frequency is advanced up (by MU key) or down (by MD key) by 1 step (channel spacing set). When it is pressed for a half second or more, the frequency is advanced rapidly (continuously) until it is released.</li><li>● Clock (time) display While pressing the ME key, press the MD key to adjust the time, and press the MU key to adjust minutes.</li></ul>																																																					
M1 M6	<p>In the Radio mode: These keys are used to write or recall the preset memory. FM, MW and LW bands can be stored independently into each key in memory.</p> <p>(1) When writing With the frequency display, within five seconds after pressing the ME key, press one key (M1 to M6), to store the frequency currently received into memory.</p> <p>(2) When recalling When one key (M1 to M6) is pressed, the memory content (frequency) corresponding to the key pressed is recalled. When the radio is turned on after the VDD is first turned on, the lowest frequency on the FM band is recalled. When shipped, the following frequencies are preset into M1 to M6 key for adjustment at the factory.</p> <table><tr><th colspan="2">Preset Memory Key</th><th>M1</th><th>M2</th><th>M3</th><th>M4</th><th>M5</th><th>M6</th></tr><tr><th>Band</th><th>Frequency Range</th><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td rowspan="3">FM</td><td>87.9 ~ 107.9 MHz</td><td>87.9</td><td>90.1</td><td>98.1</td><td>106.1</td><td>107.9</td><td>87.9</td></tr><tr><td>87.50 ~ 108.00 MHz</td><td>87.50</td><td>90.1</td><td>98.1</td><td>106.1</td><td>108.00</td><td>87.50</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td rowspan="2">MW</td><td>530 ~ 1620 kHz</td><td>530</td><td>600</td><td>1000</td><td>1400</td><td>1620</td><td>530</td></tr><tr><td>522 ~ 1611 kHz</td><td>522</td><td>603</td><td>999</td><td>1404</td><td>1611</td><td>522</td></tr></table>	Preset Memory Key		M1	M2	M3	M4	M5	M6	Band	Frequency Range							FM	87.9 ~ 107.9 MHz	87.9	90.1	98.1	106.1	107.9	87.9	87.50 ~ 108.00 MHz	87.50	90.1	98.1	106.1	108.00	87.50								MW	530 ~ 1620 kHz	530	600	1000	1400	1620	530	522 ~ 1611 kHz	522	603	999	1404	1611	522
Preset Memory Key		M1	M2	M3	M4	M5	M6																																															
Band	Frequency Range																																																					
FM	87.9 ~ 107.9 MHz	87.9	90.1	98.1	106.1	107.9	87.9																																															
	87.50 ~ 108.00 MHz	87.50	90.1	98.1	106.1	108.00	87.50																																															
MW	530 ~ 1620 kHz	530	600	1000	1400	1620	530																																															
	522 ~ 1611 kHz	522	603	999	1404	1611	522																																															

## CIRCUIT DESCRIPTION

Symbol	Function Description
M1 ↓ M6	<p>These keys are used to write and recall the preset memory.</p> <p>Each FM, MW and LW frequency can be stored into one key in memory independently.</p> <p>However, the number of available bands differ with the area designated by the initializing diode matrix, as follows:</p> <p>For the area only 2 bands are available: 6 stations <math>\times</math> 2 = 12 stations</p> <p>For the area 3 bands are available: 6 stations <math>\times</math> 3 = 18 stations</p> <p>Corresponding to the preset key pressed, the "CH" indicator and " " (channel number) are displayed on the LCD panel.</p>
SEEK UP/DOWN	<p>These keys are used for automatic tuning. During auto tuning operation, when the SD switch is turned OFF, the frequency displayed at the time is kept on hold.</p> <p>In auto tuning mode, the auto tuning operation is continued even when the LOUDNESS, ME, NR, METAL-DX/LOC, or MONO-DOLBY key is pressed.</p> <p>When one of the other keys is pressed, the auto tuning operation is stopped, and the unit enters the operation of the key pressed.</p> <p>When the SEEK key is pressed again, the frequency before the SEEK operation is resumed.</p>
DX/LOC  —MTL	<p>This key is used to select the function between DX/LOC — MTL.</p> <ul style="list-style-type: none"> <li>In the Radio mode: Each time the key is pressed, the LOC output pin and the "LOC" display on the LCD panel are inverted. When the "LOC" display on the LCD panel, high level signal is output from the LOC Out pin, and when it is not lit, low level is output.</li> <li>In the Tape mode: Each time the key is pressed, the LOC output pin and the "MTL" display are inverted. When the "MTL" is displayed on the LCD panel, low level signal is output from the LCD Out pin, and when it is not lit, high level is output. By initialization when the power is turned on, high level signal is output.</li> </ul>
ME	<p>This key is used for writing the preset memory. It is also used for adjusting the time on clock display.</p> <ul style="list-style-type: none"> <li>Frequency display: Used when writing a new frequency into the preset memory. When this key is pressed, the "ME" is displayed on the LCD panel, and lit for five seconds after the key is released. While the "ME" is lit, pressing one key (M1 to M6) stores the displayed frequency into memory corresponding to the key pressed. To cancel the preset memory, while the "ME" is lit, press any key other than ME, NE, METAL-DX/LOC, MONO-DOLBY, or LOUDNESS.</li> <li>Clock display: The "hour" and "minutes" can be adjusted by pressing the MD or MU key while pressing the ME key. After pressing the ME key, each time the MD key is pressed, the "hour" is advanced one by one. Pressing it for a half second or more advances the time by 4 hours/sec continuously until the MD key is released. This operation does not affect the "minute" or "second" digits (they are not displayed during this operation). After pressing the ME key, each time the MU key is pressed, the "minute" is advanced one by one. Press it for a half second or more advances the minute in 8 minutes/sec speeds continuously, until the MU key is released. The "second" is not displayed, however, it is reset to zero every time the "minute" is set. The "minute" adjusting does not affect the "hour". ("Hour" is not changed even when the "minute" exceeds 60.) (During clock display, pressing the ME key alone changes the display to frequency and "ME" is displayed. In this condition, pressing one of the preset keys (M1 to M6) stores the frequency into the memory corresponding to the key pressed.)</li> </ul>
BAND	<p>This key is used to select the band.</p> <p>When Band A is "0" or "1" and Band B is "0" (LW: Not available) ...</p> <p>Each time this key is pressed, the band is changed in the order of FM — MW — FM ...</p>
LOUDNESS	<p>Used for Loudness select key.</p> <p>Each time this key is pressed, the loudness output pin and the "LOUD" display on the LCD panel are inverted. When the "LOUD" is displayed on the LCD panel, low level signal is output from the Loudness pin and when it is not lit, high level is output.</p> <p>By initialization when the power is first turned on (rising time of VDD), "LOUD" is displayed and low level is output.</p>

## CIRCUIT DESCRIPTION

Symbol	Function Description
RCAL	<p>Display select key. Available only when in the radio mode.</p> <p>When this key is pressed, the display is changed from the clock display to frequency or vice versa. However, five seconds after the key is pressed, the display is restored to the priority mode (depending on the diode matrix PRIORITY).</p> <p>When the clock is not provided (CLKSEL=0), this key has no effect.</p> <p>However, the clock display is resumed by the PRIORITY switch when the display priority is provided.</p> <p>a) ON: Priority is provided b) OFF: No priority</p>
NR	<p>(1) NR key (RADIO/TAPE common key) (2) WIDE-ADV key (Independent RADIO/TAPE key)</p> <p>(1) NR key: BAND A: "0", "1" NR SEL: "1" With the above status, this key is used as the NR select key. Each time the key is pressed, the BAND2/NR output pin and "NR" display on the LCD panel are inverted. When "NR" is displayed on the LCD panel, the BAND2/NR pin outputs the high level, and when the display is not lit, low level is output. (By initialization when the power is turned on, it outputs low level.)</p> <p>(2) WIDE-ADV key: BAND A: "0", "1" NR SEL: "1" With the above status, this key is used as the WIDE-ADV select key.</p> <p>In the Radio mode: Used as the WIDE select key. Each time the key is pressed, the BAND2/ADV output pin and the "WIDE" display on the LCD panel are inverted. When the "WIDE" is displayed on the LCD panel, the BAND2/ADV pin outputs the high level, and when the display is not lit, low level is output.</p> <p>On Tape mode: Used as the ADV select key. Each time the key is pressed, the BAND2/NR output pin and the "ADV" display on the LCD panel are inverted. When the "ADV" is displayed on the LCD panel, the BAND2/NR pin outputs the high level. When the display is not lit, the low level is output. (By initialization when the power is turned on, low level is output.)</p> <p>Note: When the following status is selected in the diode matrix, the NR key and the WIDE-ADV key are not effective. NR SEL: "0" BAND A: "0" BAND B: "1"</p>
M5 BAND	<p>This key is used for setting the received frequency range for FM/MW/LW band and the channel spacing.</p> <ol style="list-style-type: none"> <li>By initialization when the power is turned on, the receiving frequency and channel spacing are registered by the diode of BAND A. Then, when the CE pin goes, <math>\overline{H} \rightarrow H</math> or vice versa, they follow the diode of BAND A.</li> <li>When the CE pin is inverted to high from low while pressing the M5 key and the BAND key together, the band setting of BAND A is changed from "1" to "0" or from "0" to "1". Then, when the CE pin is inverted to <math>\overline{H} \rightarrow H</math> or vice versa, the changed area setting is maintained.</li> <li>When the CE pin is inverted from low to high while pressing the M5 key and BAND key together, the band setting follows the diode of BAND A. Then, when the CE pin is inverted from <math>\overline{H} \rightarrow H</math> or vice versa, it follows the diode of BAND A, too.</li> <li>To change the setting by the M5 key and the BAND key, repeat procedure 2 and 3.</li> </ol> <p>Note: On initialization when the power is turned on, the M5 key and the BAND key are ignored even when they are pressed, and the setting is followed to the diode.</p>



## ADJUSTMENT

Set the controls and switches as follows.

BALANCE : center position    LOUD : OFF    LOCAL : OFF  
 FADER : center position    T-ADV : OFF    AUTO : OFF  
 BASS : center position    METAL : OFF  
 TREBLE : center position    DOLBY NR : OFF

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	RECEIVER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
FM SECTION							
1	DISCRIMINATOR	(A) 98.1MHz 0 dev 60dB $\mu$ V (ANT input)	Connect the DC voltmeter between pins of TP1.	FM 98.1MHz	T1 (X05-)	0V	
2	PILOT CANCELLER	(A) 98.1MHz 0 dev Pilot: $\pm 7.5$ kHz dev 60dB $\mu$ V (ANT input)	(B)	FM 98.1MHz	VB7 (X05-)	Minimum output	
3	SEPARATION	(C) 98.1MHz 1kHz $\pm 67.5$ kHz dev Pilot: $\pm 7.5$ kHz dev Selector: L or R 60dB $\mu$ V (ANT input)	(B)	FM 98.1MHz	VB2 (X05-)	Adjust it so that the crosstalk from L to R and R to L become minimum.	
4	ANRC	(C) 98.1MHz 1kHz $\pm 67.5$ kHz dev Pilot: $\pm 7.5$ kHz dev Selector: L or R 60dB $\mu$ V (ANT input) 2.55dB $\mu$ V (ANT input) 3.39dB $\mu$ V (ANT input) 4. 1~3	(B)	FM 98.1MHz	VB3 (X05-) VB2 (X05-) VB1 (X05-)	a. Optimum separation. b. The value approx. -1dB below the above level. c. 10dB $\mu$ V separation. d. Repeat a to c until the most optimum separation is obtained.	
5	STOP LEVEL	(A) 98.1MHz 0 dev 20dB $\mu$ V (ANT input)	—	FM 98.1MHz		STOP	
6	SOFT MUTE (1)	(A) 98.1MHz 1kHz $\pm 7.5$ kHz dev 60dB $\mu$ V (ANT input)	(B)	FM 98.1MHz		Set the volume to 0 dBs.	
7	SOFT MUTE (2)	ANT OPEN (No Signal)	(B)	FM 98.1MHz		-25dBs	
AM SECTION							
1	STOP LEVEL	(B) 990kHz 40dB $\pm 30$ dB and 35dB $\mu$ V (ANT input)	—	AM 990kHz	TR1 (X14-)	STOP	
CASSETTE DECK SECTION							
1	AZIMUTH	MTT-114(10kHz)	(B)	TAPE PLAY	Head Azimuth screw	Adjust the azimuth for each L-CH/R-CH or POW/REV becomes maximum.	

## REGLAGES

Régler les contrôles et les boutons comme suit.

BALANCE : position centre      LOUD : OFF      LOCAL : OFF  
 FADER : position centre      T.ADV : OFF      AUTO : OFF  
 BASS : position centre      METAL : OFF  
 TREBLE : position centre      DOLBY NR : OFF

N°	ITEM	REGLAGE DE L'ENTRÉE	REGLAGE DE LA SORTIE	REGLAGE DU RECEIVER	POINTS DE L'ALIGNEMENT	ALIGNER POUR	FIG.
SECTION MF							
1	DISCRIMINATEUR	(A) 98.1MHz 0 dev 80dB $\mu$ V (Entrée ANT)	Connecter le voltmètre CC entre les broches de TP1	FW 98.1MHz	T1 (X95-)	0V	
2	AMPLIFICATEUR PILOTE	(A) 98.1MHz 0 dev Pilote: 7.5kHz dev 80dB $\mu$ V (Entrée ANT)	(B)	FW 98.1MHz	VR7 (X95-)	Sortie minimum	
3	SEPARATION	(C) 98.1MHz 1kHz: 7.5kHz dev Pilote: 7.5kHz dev Sélecteur: L ou R 80dB $\mu$ V (Entrée ANT)	(B)	FW 98.1MHz	VR2 (X95-)	L'ajuster pour que la diaphonie de L à R et de R à L devienne minimaux.	
4	ANRC	(C) 98.1MHz 1kHz: 67.5kHz dev Pilote: 7.5kHz dev Sélecteur: L ou R 1. 80dB $\mu$ V (Entrée ANT) 2. 55dB $\mu$ V (Entrée ANT) 3. 30dB $\mu$ V (Entrée ANT) 4. 1-3	(B)	FW 98.1MHz	VR3 (X95-)  VR1 (X95-)	a. Séparation optimale. b. Valeur approximative -1 dB en-dessous du niveau ci-dessus. c. Séparation 10 dB. d. Répéter a à c jusqu'à ce que la séparation optimale soit obtenue.	
5	NIVEAU D'ARRET	(A) 98.1MHz 0 dev 80dB $\mu$ V (Entrée ANT)	-	FW 98.1MHz		ARRÊT	
6	SILENCIEUX DOUX (1)	(A) 98.1MHz 1kHz: 7.5kHz dev 80dB $\mu$ V (Entrée ANT)	(B)	FW 98.1MHz		Régler le volume sur 0 dB.	
7	SILENCIEUX DOUX (2)	ANT OUTERT (pas de signal)	(B)	FW 98.1MHz		-25dB	
SECTION MA							
1	NIVEAU D'ARRET	(B) 990kHz 400Hz. 30% mod 25dB $\mu$ V (Entrée ANT)	-	AM 990kHz	VR1 (X14)	ARRÊT	
SECTION PLATINE A CASSETTE							
1	AZIMUT	MTT-114(10kHz)	(B)	LECTURE DE BANDE	Vis d'axe de tête	Ajuster l'axe de tête pour que chaque canal L/canal R ou FOM/REV devienne maximaux.	

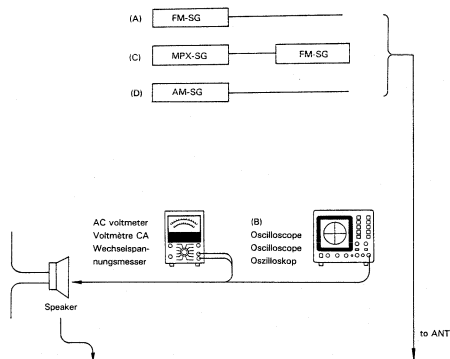
## ABGLEICH

Die Regler und Knöpfe wie folgt einstellen.

BALANCE : Mittellage      LOUD : OFF      LOCAL : OFF  
 FADER : Mittellage      T ADV : OFF      AUTO : OFF  
 BASS : Mittellage      METAL : OFF  
 TREBLE : Mittellage      DOLBY NR : OFF

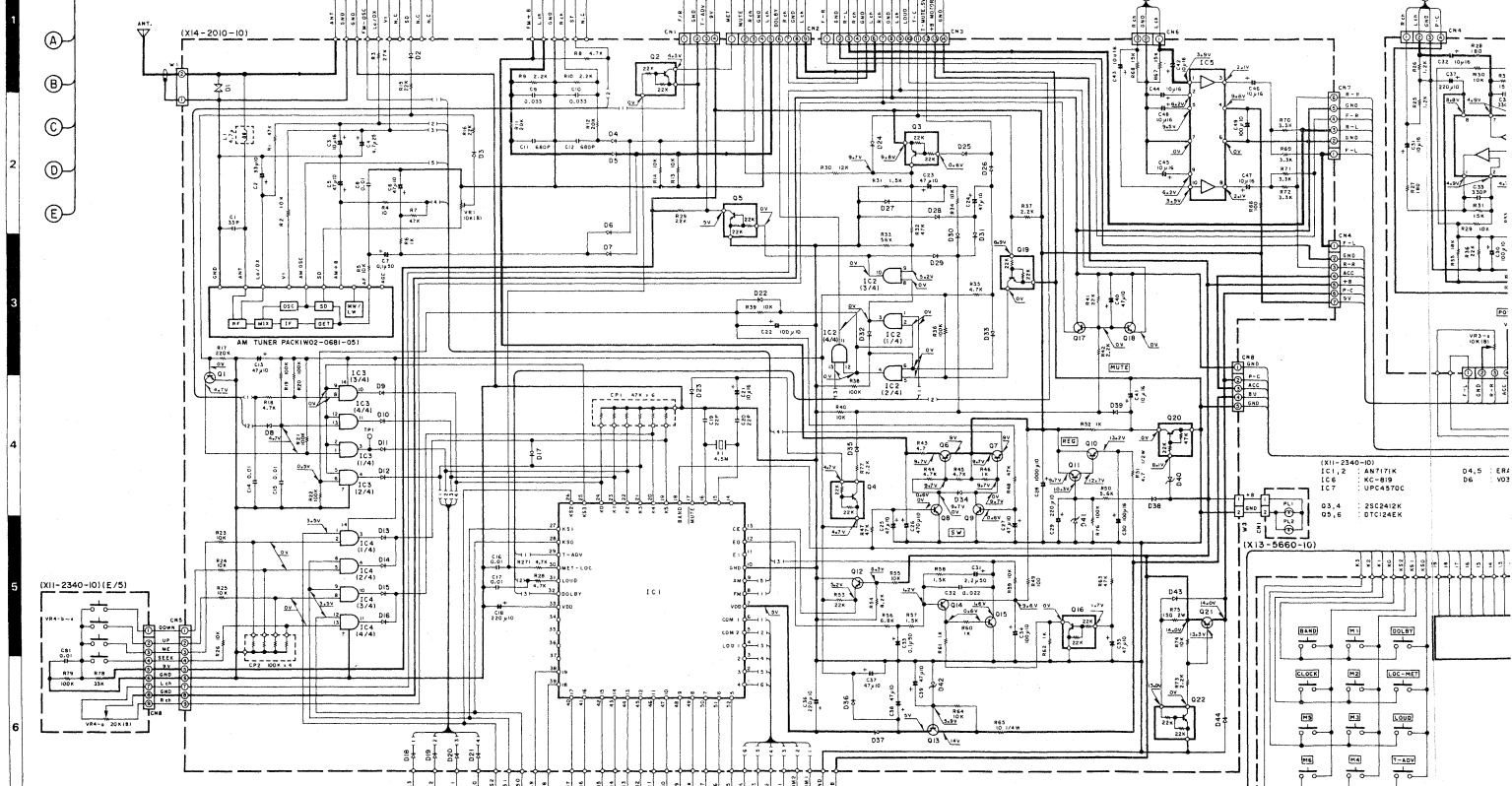
NR.	GEGENSTAND	EINGANGS-EINSTELLUNG	AUSGANGS-EINSTELLUNG	RECEIVER-EINSTELLUNG	ABGLEICH PUNKTE	ABGLEICHEN FÜR	ABB.
UKW-ABTEILUNG							
1	DISKRIMINATOR	(A) 98.1MHz 8 Hub 80dBµV (ANT-Eingang)	Den Gleichstrom-Voltmeter zwischen den TPI-Stiften anschließen.	FM 98.1MHz	T1 (X05-)	0V	
2	PILOTZEICHEN- LÖSCHER	(A) 98.1MHz 8 Hub Pilot: ±7.5kHz Hub 80dBµV (ANT-Eingang)	(B)	FM 98.1MHz	YR7 (X05-)	Minimaler Ausgang	
3	TRENNUNG	(C) 98.1MHz 1kHz±67.5kHz Hub Pilot: ±7.5kHz Hub Wahler: L oder R 80dBµV (ANT-Eingang)	(B)	FM 98.1MHz	YR2 (X05-)	So einstellen, daß das Übersprechen von L nach R und von R nach minimal ist.	
4	AYBC	(C) 98.1MHz 1kHz±67.5kHz Hub Pilot: ±7.5kHz Hub Wahler: L oder R 1. 80dBµV (ANT-Eingang) 2. 35dBµV (ANT-Eingang) 3. 30dBµV (ANT-Eingang) 1. 1~3	(B)	FM 98.1MHz	YR3 (X05-) YR3 (X05-) YR1 (X05-)	a. Optimale Trennung. b. Der Wert liegt etwa -1 dB unter den obigen Wert. c. Trennung 10 dB. d. Die Schritte a bis c wiederholen, bis die optimale Kanaltrennung erreicht ist.	
5	STOPPEGEL	(A) 98.1MHz 8 Hub 80dBµV (ANT-Eingang)	-	FM 98.1MHz		STOP	
6	WEICHE DÄMPFUNG (1)	(A) 98.1MHz 1kHz±75kHz Hub 80dBµV (ANT-Eingang)	(B)	FM 98.1MHz		Die Lautstärke auf 0 dB einstellen.	
7	WEICHE DÄMPFUNG (2)	ANT OPEN (Kein Signal)	(B)	FM 98.1MHz		-25dBs	
MW-ABTEILUNG							
1	STOPPEGEL	(D) 990kHz 400Hz 30% mod 35dBµV (ANT-Eingang)	-	MW 990kHz	YR1 (X14)	STOP	
CASSETTEN-DECK-ABTEILUNG							
1	AZIMUT	MTT-114 (10kHz)	(B)	CASSETTEN- VIERGABE	Tonkopf Azimut Schraube	Maximut auf Maximierung von L-CH/R-CH oder FOR/REV einstellen.	

## ADJUSTMENT/REGLAGES/ABGLEICH



100

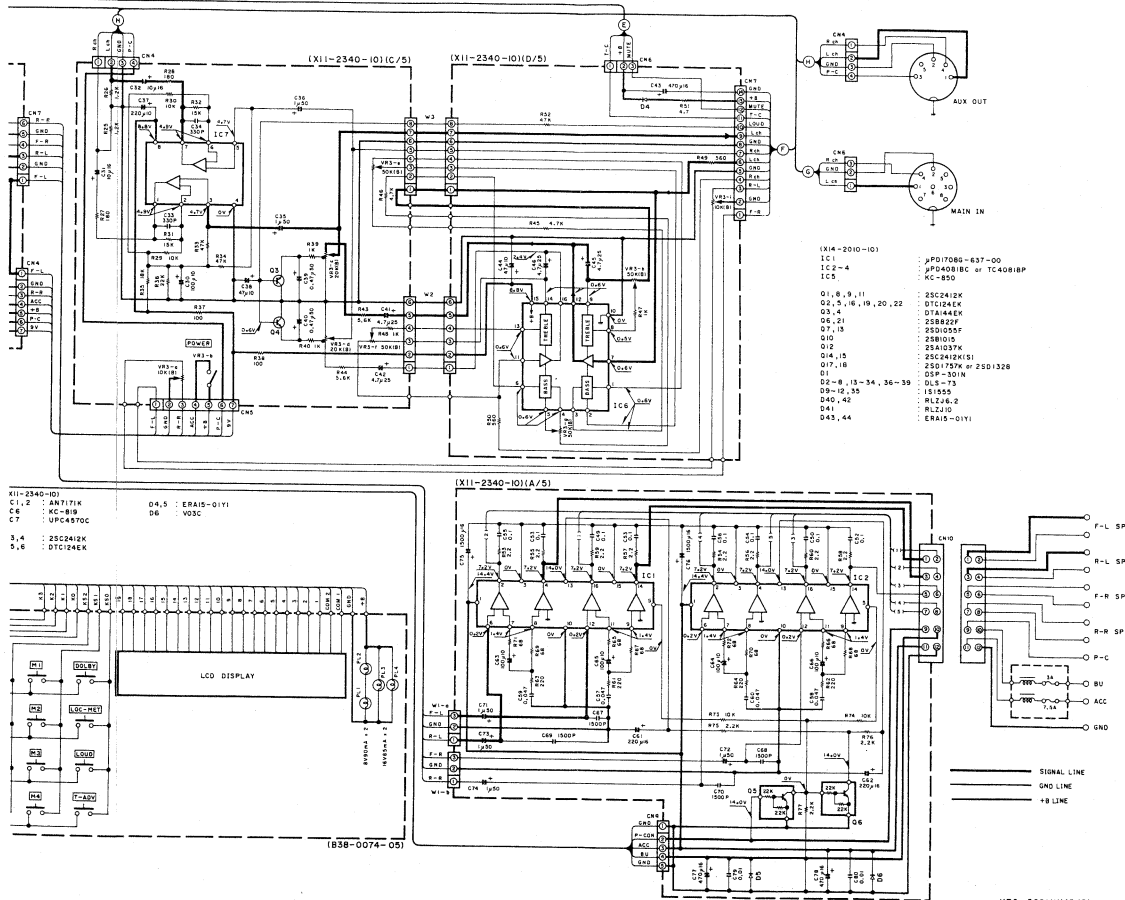




(X11-2340-10)  
 IC1, 2 AN7171K  
 IC6 KC819  
 IC7 UPC4570C  
 D4, 5 2SC2412K  
 D5, 6 DTC124EX  
 D4, 5 ER1  
 D6 V02

- 2SB101S    2SB822F    DTA144EK    TC4081BP    UPC4570C    KC819    KC850    AN7171K     $\mu$ PD1708G-637-00
- 2SD1055F    DTC124EX    2SC2412K    UPD40818C







DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

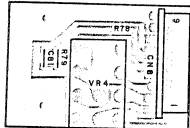
Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.

**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  indicates safety critical components. **Do not**

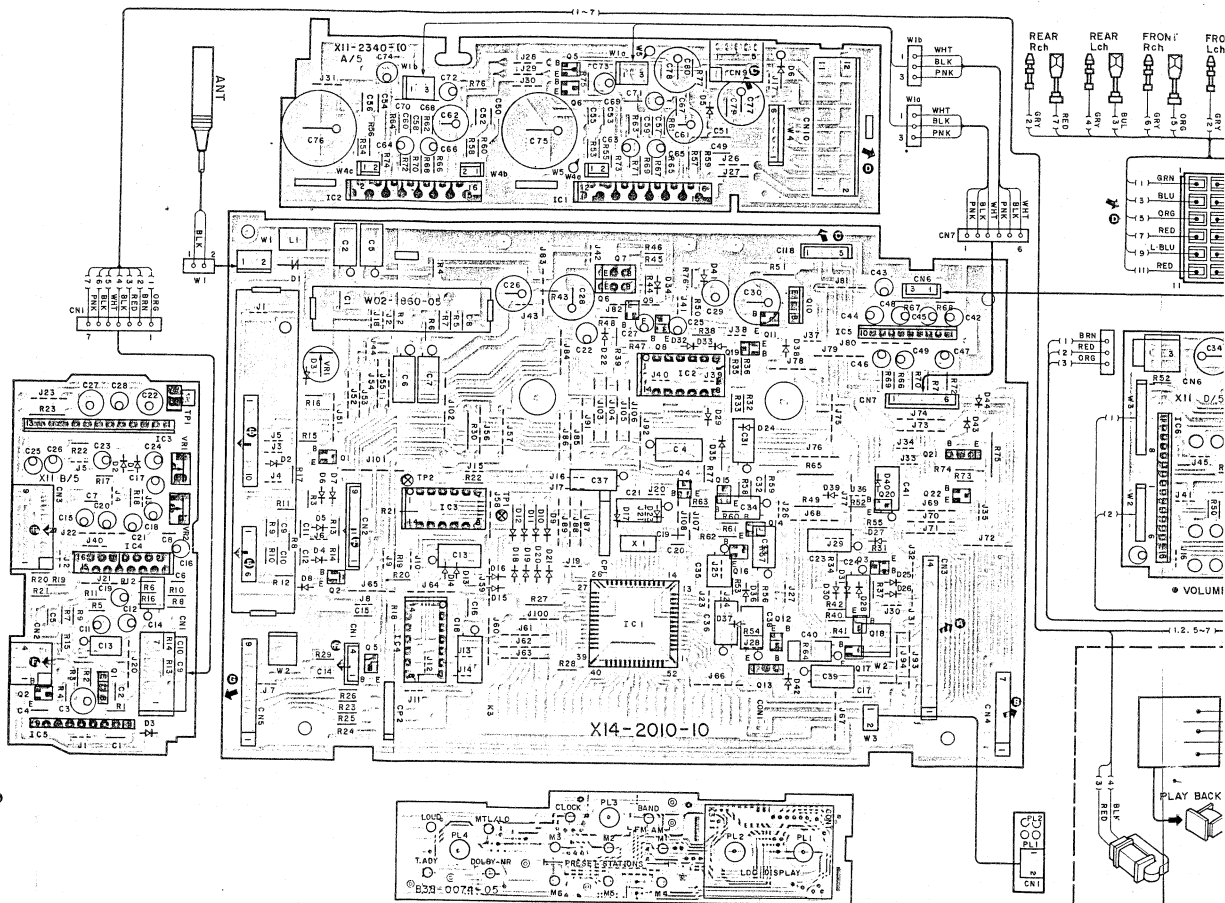
to parts marked with  indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.



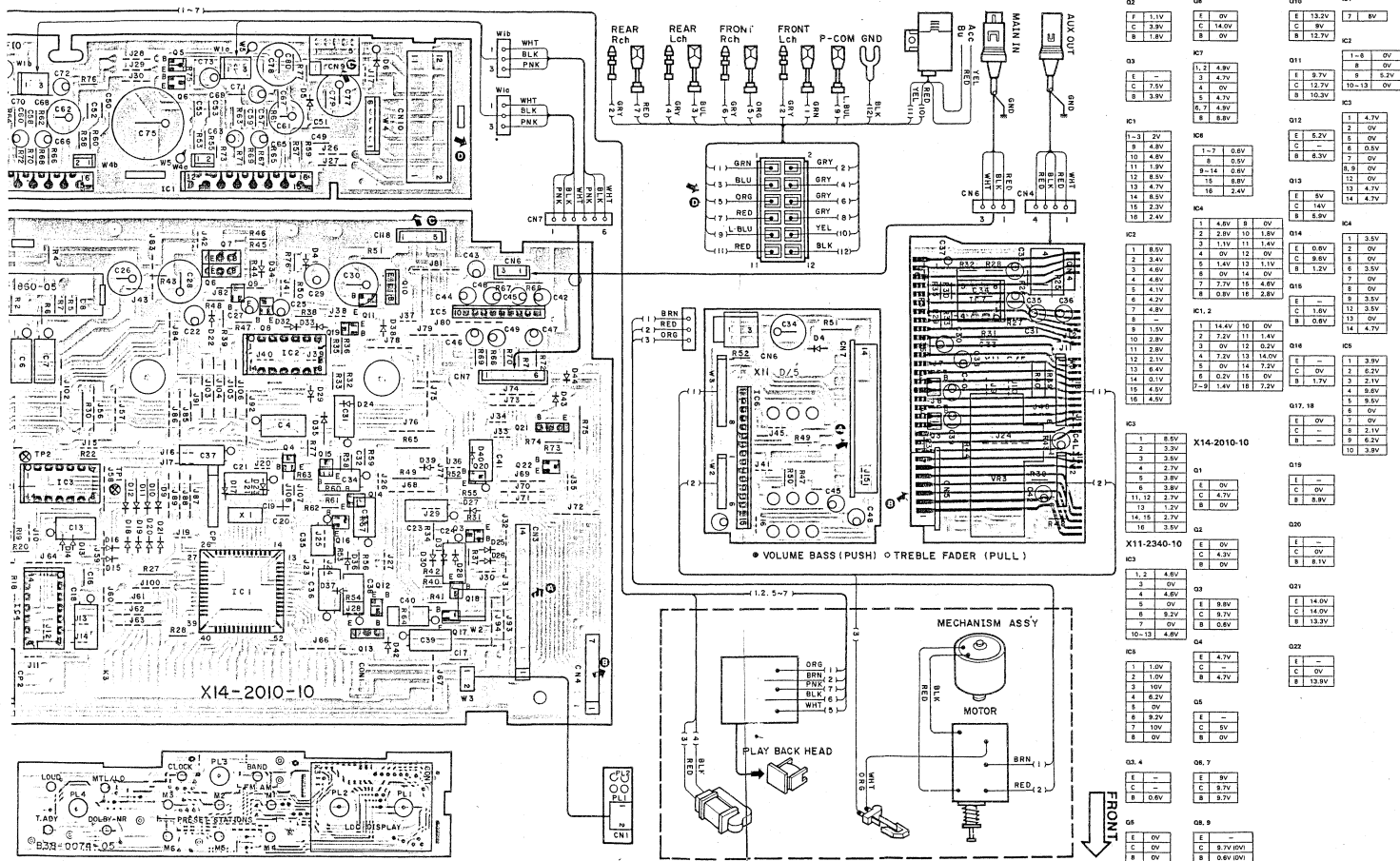
- TUNING MANUAL SEEK (PUSH)
- MEMORY BALNCE (PULL)



KRC - 5001



## PC BOARD

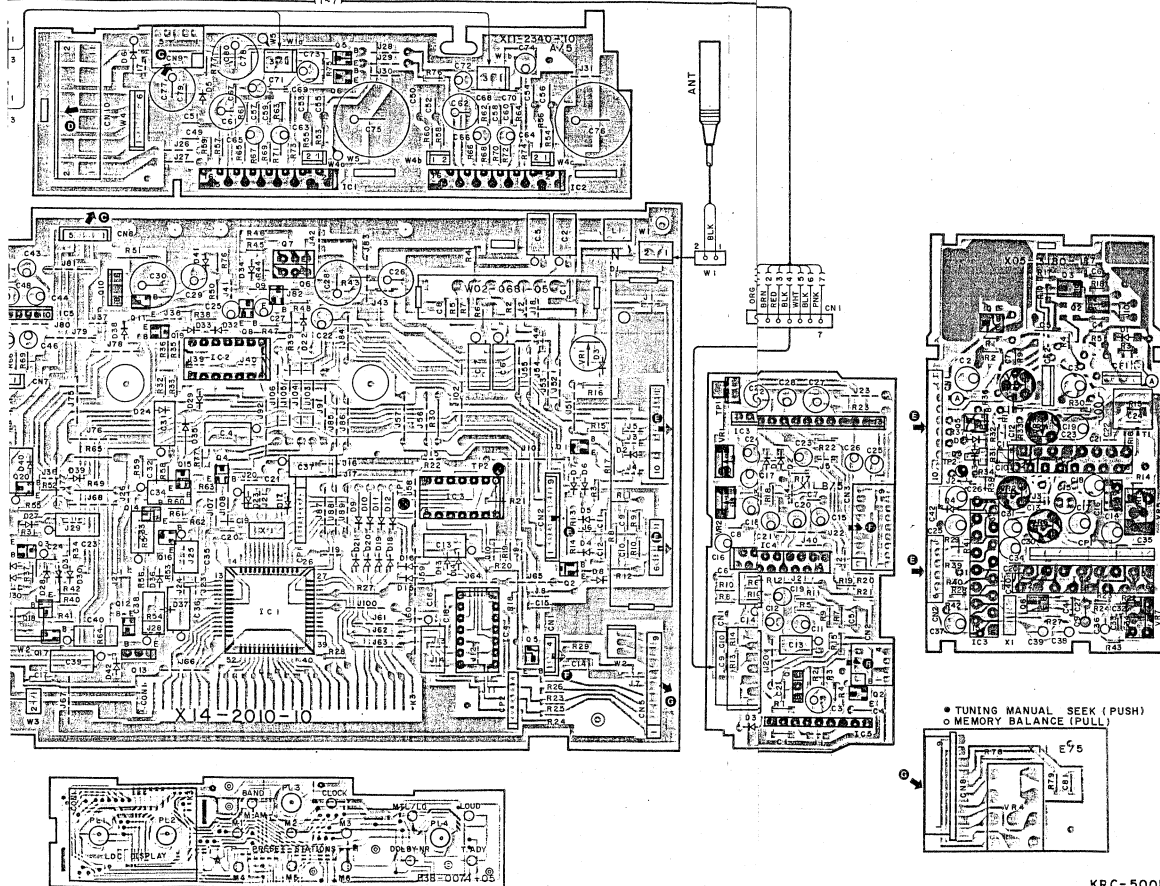


## — 127 —



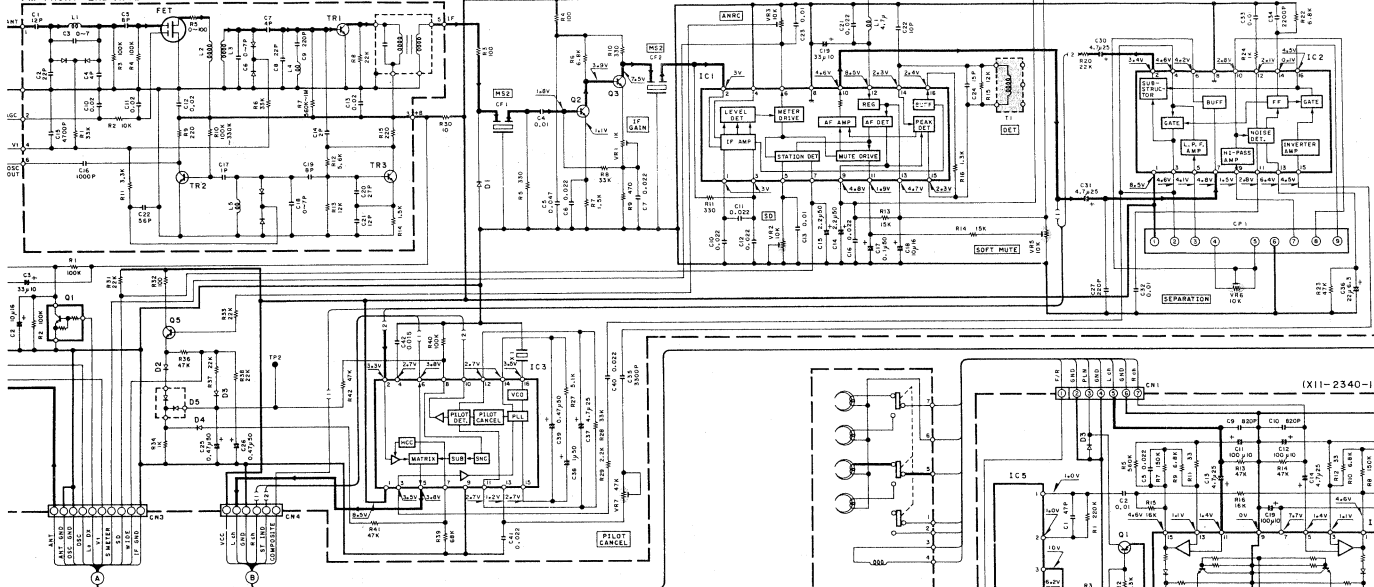
## PC BOARD

(1-7)



(X05-3180-11)

FM FRONT-END (W02-0708-05)



(X05-3180-11)  
IC : TA741AP  
IC1 : LA210  
IC : LA340  
IC : LA340

Q1 : DTC124EK  
Q2 : 25C243N  
Q5 : 25C242K

D1-4 : RL5-73 or DL515B5  
D5 : DAN202K

(W02-0708-05)

FET : 35K101

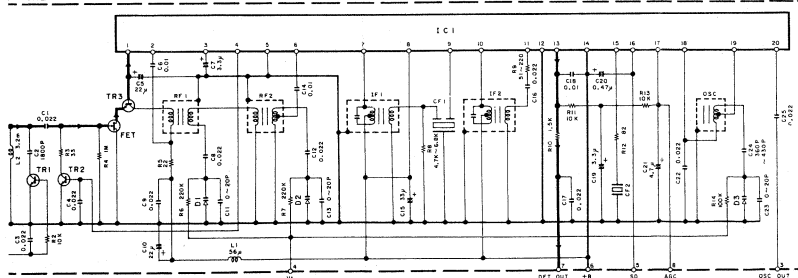
TR1 : 25C2620 or 25C2714  
TR2 : 25C2175  
TR3 : 25C2955

(X21-2680-10)

IC4 : KC-819

— SIGNAL L  
— GND LINE  
— +B LINE

I TUNER PACK (W02-0681-05)



(W02-0681-05)

IC1 : LA1135

TR1-3 : 25C2814, 25C2716  
or 25C2619

FET : 25K163 or 25K523

D1-3 : 5VC321 or 15V149

DEF OUT

ACC

OSC OUT

OSC OUT

OSC OUT

OSC OUT

OSC OUT

OSC OUT

OSC OUT

OSC OUT

OSC OUT

OSC OUT

OSC OUT

OSC OUT

OSC OUT

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OSC OUT

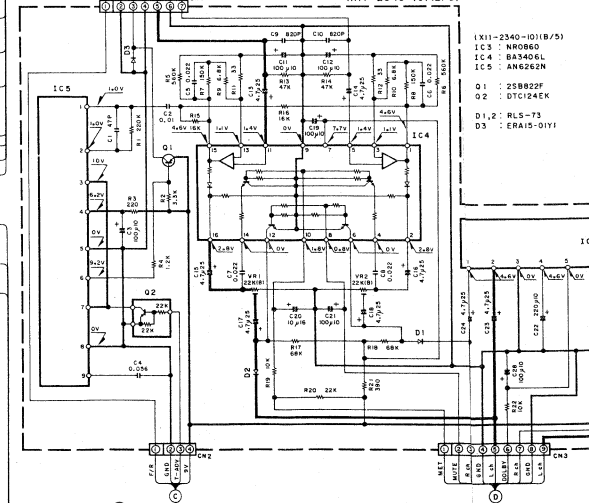
OSC OUT

OSC OUT

OSC OUT

OSC OUT

(X11-2340-10)(B/5)

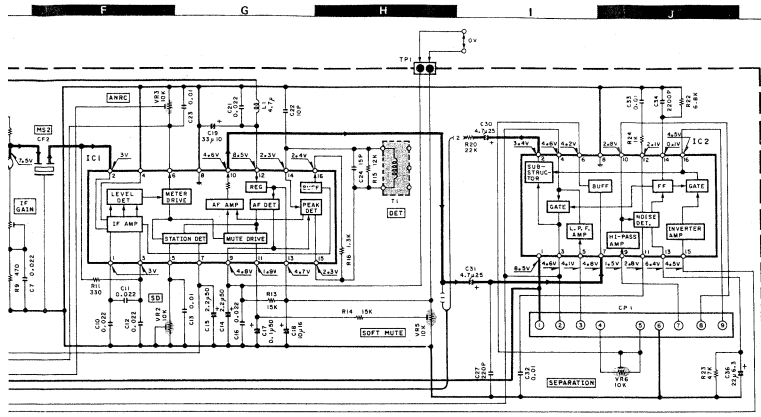


(X11-2340-10)(B/5)  
IC3 : NR0860  
IC4 : BA3406L  
IC5 : AN6562N

D1 : 25B822F  
Q2 : DTC124EK

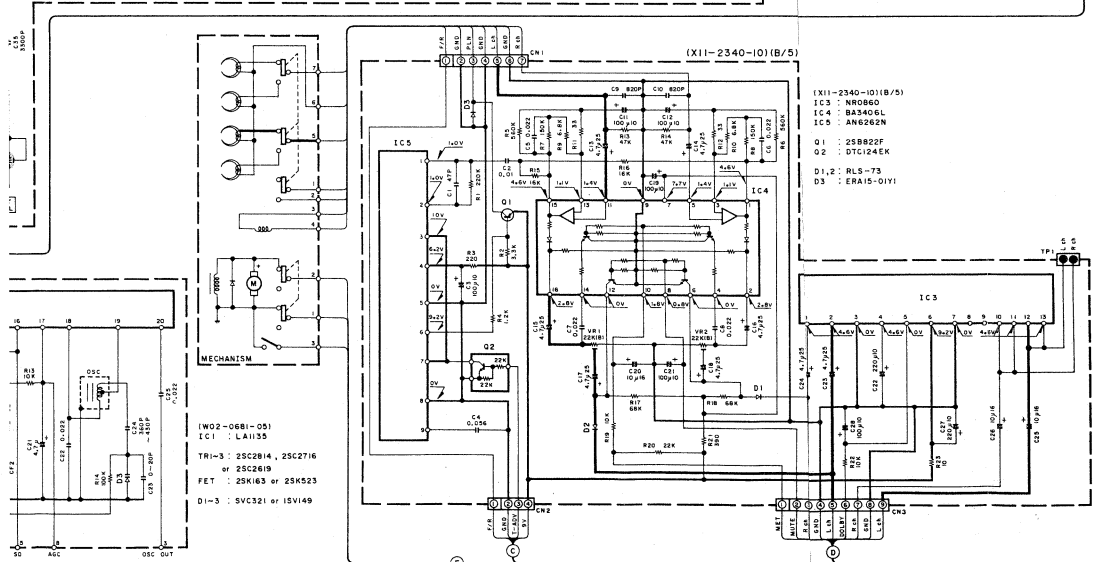
D1,2 : RL5-73

D3 : ERA15-01Y1

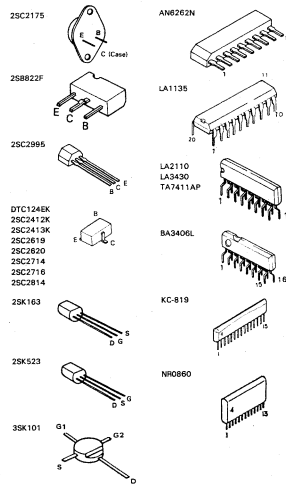


(X0-3180-11)  
 IC : TA7411AP  
 IC : LA2110  
 IC : LA3430  
 Q1 : DTC124EK  
 Q2 : 25C2413K  
 Q3 : 25C2412K  
 D1-4 : RLS-73 or DLS1585  
 D5 : DAN202K  
 (W0-0708-05)  
 FET : 3SK101  
 TR1 : 25C2620 or 25C2714  
 TR2 : 25C2175  
 TR3 : 25C2995  
 (X2-2680-10)  
 IC4 : KC-819

SIGNAL LINE  
 GND LINE  
 +B LINE



(X11-2340-10)(B/5)  
 IC3 : NRO860  
 IC4 : BA3406L  
 IC5 : AN6262N  
 Q1 : 25B822F  
 Q2 : DTC124EK  
 D1,2 : RLS-73  
 D3 : ERA15-01Y1



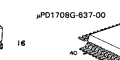
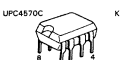
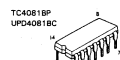
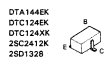
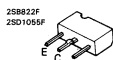
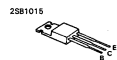
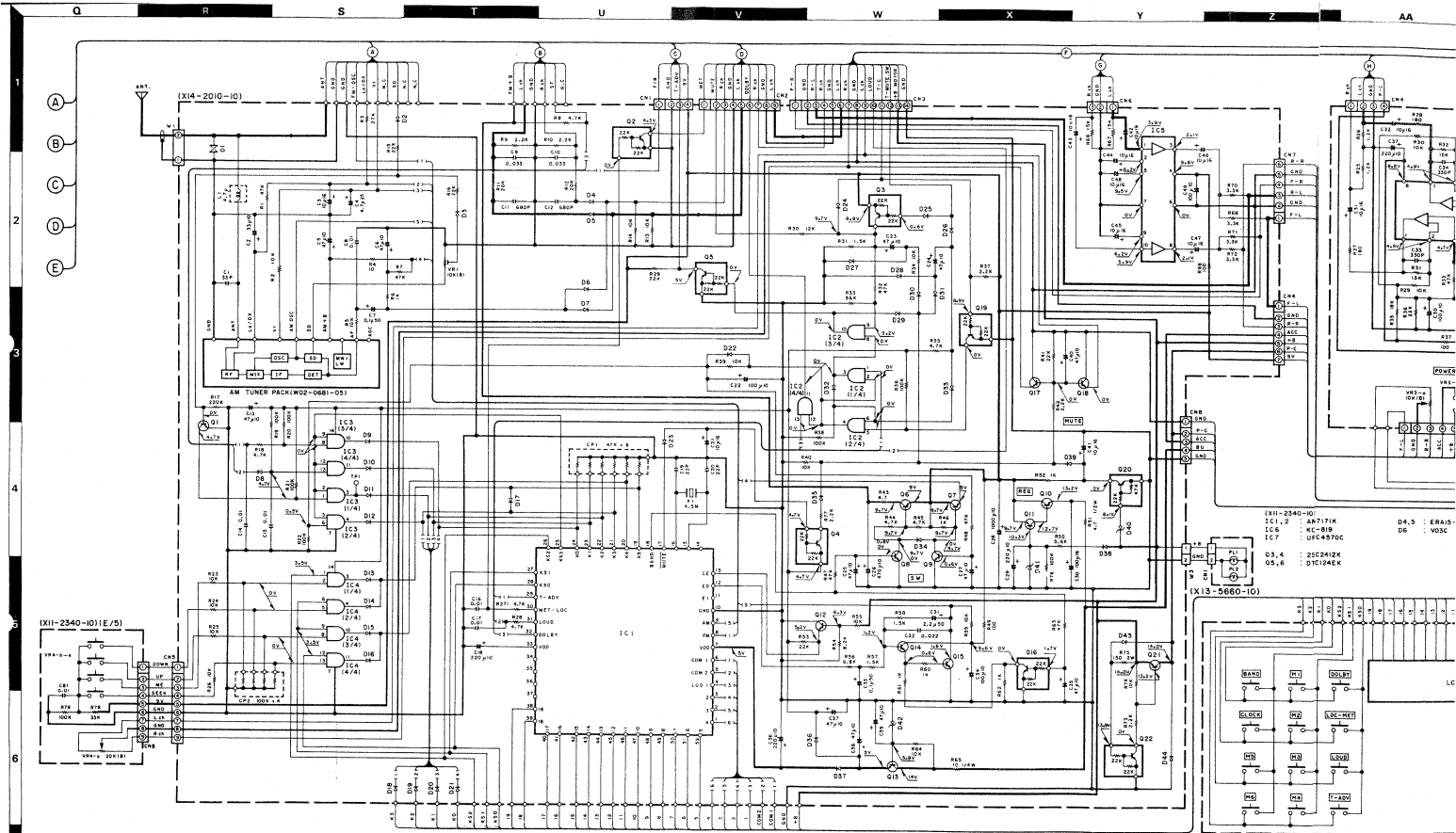
DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

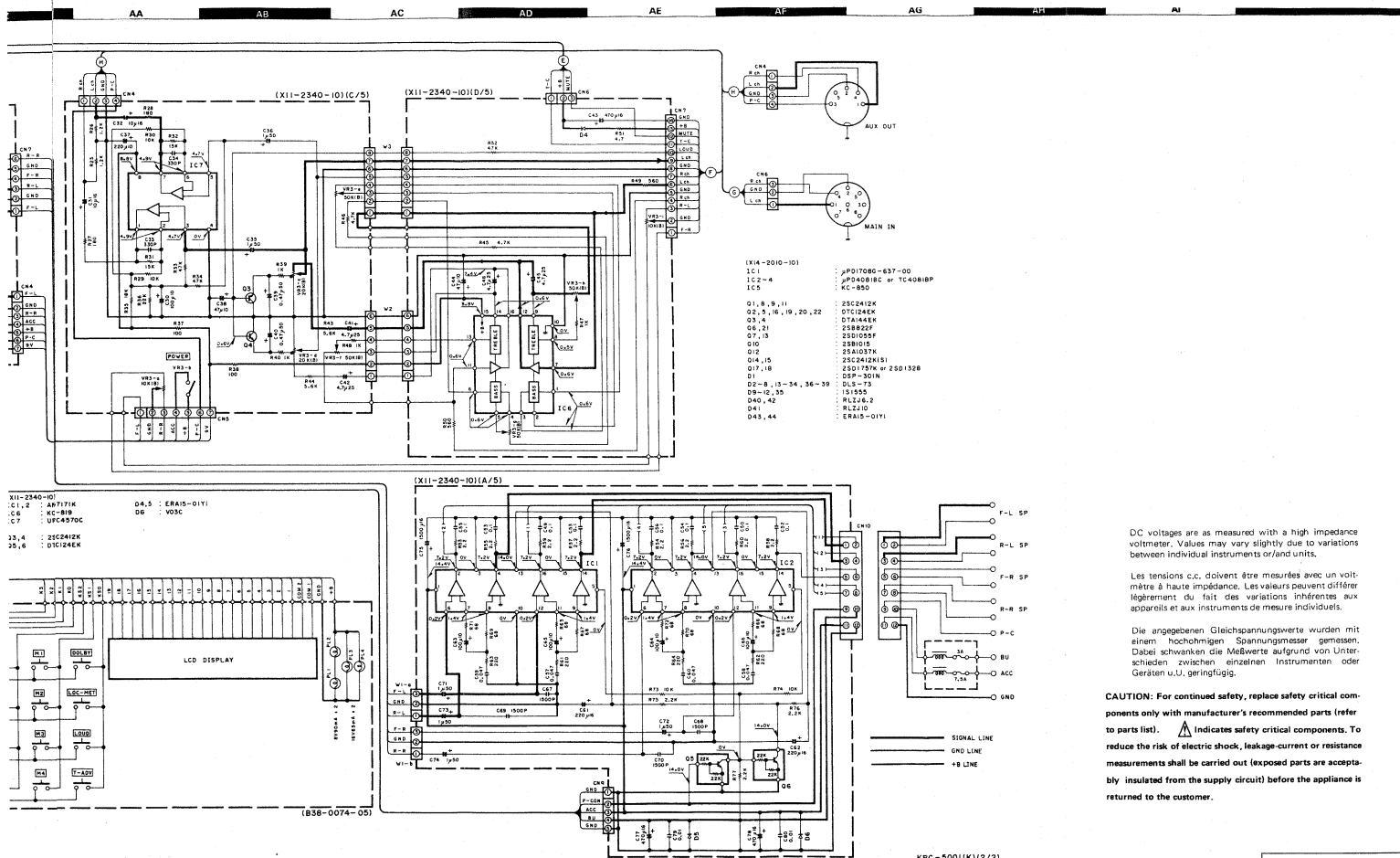
Les tensions c.c. doivent être mesurées avec un volt-mètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U., geringfügig.

**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

**KRC-5001**  
**KENWOOD**





DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.

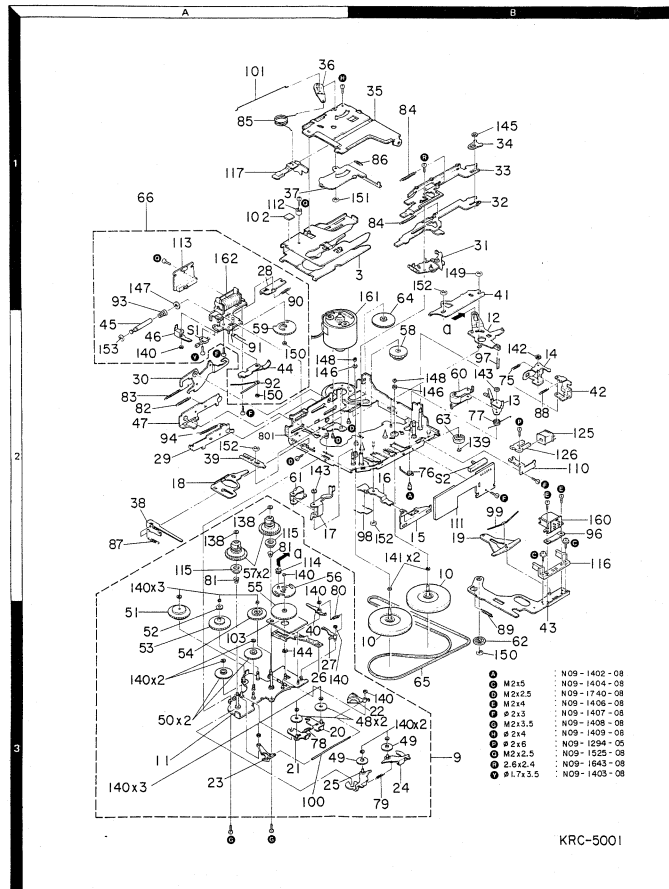
**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). **⚠** Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

**KRC-5001**  
**KENWOOD**

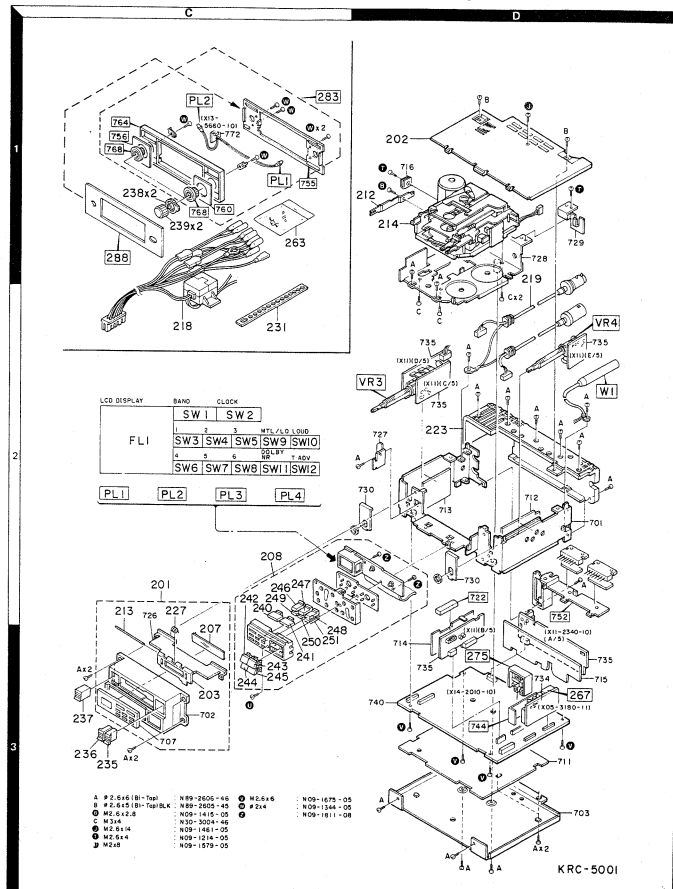


# KRC-5001 KRC-5001

## EXPLODED VIEW (MECHANISM)



## EXPLODED VIEW (MAIN)



## PARTS LIST

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

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参照番号	位置	新	部品番号	部品名 / 規格	仕	向
KRC-5001						
201	2C	*	A20-5094-02	PANEL ASSY		
202	1D	*	A52-0100-12	FRONT COVER		
203	3C	*	A52-0102-03	FRONT BOARD		
207	3C	*	B11-0141-04	COLOR FILTER (CASSETTE LID)		
208	2C	*	B38-0074-05	LIQUID CRYSTAL (LCD ASSY)		
-		*	B46-0100-00	WARRANTY CARD		
-		*	B46-0118-03	QUESTIONNAIRE CARD		
-		*	B50-6542-00	INSTRUCTION MANUAL		
-		*	B58-0814-04	CAUTION CARD		
-		*	B58-0834-04	CAUTION CARD		
FL1	2C	*	B38-0084-08	LIQUID CRYSTAL		
PL3	2C	*	B39-1119-05	LAMP (LCD ASSY)		
212	1D	*	D10-1318-04	LEVER (EJECT)		
213	1C	*	D21-0512-04	SHAFT		
214	1D	*	D40-0391-05	CASSETTE MECHANISM ASSY		
218	1C	*	E30-1526-05	DC BOARD		
219	1D	*	E30-1527-05	BOARD WITH DIN CONNECTOR		
223	2D	*	F01-1135-05	HEAT SINK (REAR)		
F1		*	F05-3026-05	FUSE (3A) DC BOARD ASSY		
F2		*	F05-7521-05	FUSE (7.5A) DC BOARD ASSY		
227	2C	*	G01-1958-04	TENSION COIL SPRING		
-		*	H01-7371-04	ITEM CARTON CASE		
-		*	H03-0861-04	OUTER CARTON CASE		
-		*	H10-1862-13	POLYSTYRENE FRAMED FIXTURE		
-		*	H10-1895-03	POLYSTYRENE FRAMED FIXTURE		
-		*	H25-0029-04	PROTECTION BAG (60X110)		
-		*	H25-0103-04	PROTECTION BAG (125X250X0.07)		
-		*	H25-0117-04	PROTECTION BAG (180X250X0.07)		
-		*	H25-0226-04	PROTECTION BAG (180X300X0.05)		
-		*	H25-0234-04	PROTECTION BAG		
-		*	H25-0268-04	PROTECTION BAG		
231	2C	*	J54-0059-04	STAY		
235	3C	*	K27-1579-14	KN8B (BUTTON) FF		
236	3C	*	K27-1580-14	KN8B (BUTTON) REW		
237	3C	*	K27-1581-14	KN8B (BUTTON) EJECT		
238	1C	*	K29-1888-04	KN8B (TUNING:VOLUME)		
239	1C	*	K29-1889-04	KN8B		
240	2C	*	K27-1766-08	KN8B (BUTTON) BAND		
241	3C	*	K27-1767-08	KN8B (BUTTON) CLACK		
242	2C	*	K27-1768-08	KN8B (BUTTON) MTL/L6		
243	3C	*	K27-1769-08	KN8B (BUTTON) LSUD		
244	3C	*	K27-1770-08	KN8B (BUTTON) DSBLY NR		
245	3C	*	K27-1771-08	KN8B (BUTTON) T. ADV		
246	2C	*	K27-1772-08	KN8B (BUTTON) 1		
247	2C	*	K27-1773-08	KN8B (BUTTON) 2		
248	3C	*	K27-1774-08	KN8B (BUTTON) 3		
249	2C	*	K27-1775-08	KN8B (BUTTON) 4		
250	3C	*	K27-1776-08	KN8B (BUTTON) 5		
251	3C	*	K27-1781-08	KN8B (BUTTON) 6		

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263	1C	*	N99-0066-15	SCREW SET		
J	1D	*	N09-1415-05	MACHINE SCREW (M2.6X2.8)EJECT		
I	1D	*	N09-1461-05	STEPPED SCREW (M2.6X1.4)		
U	1D	*	N09-1214-05	TAPTITE SCREW (M2.6X4)		
	3C	*	N09-1579-05	TAPTITE SCREW (M2X8)		
V	3D	*	N09-1672-05	TAPTITE SCREW (M2.6X6)		
Z	2D	*	N09-1811-05	SCREW (LCD ASSY)		
TUNER UNIT (X05-3180-11)						
C2		*	C90-0478-05	ELECTR8 100F 16WV		
C3		*	C90-0831-05	ELECTR8 30F 10WV		
C4		*	CK73FB1H103K	CHIP C 0.010UF K		
C5		*	CK73EB1H473K	CHIP C 0.047UF K		
C6	7	*	CK73FB1H223K	CHIP C 0.022UF K		
C9		*	CE04DW1A101M	ELECTR8 100UF 10WV		
C10	-12	*	CK73FB1H223K	CHIP C 0.022UF K		
C13		*	CK73FB1H103K	CHIP C 0.010UF K		
C14	15	*	C90-0508-05	ELECTR8 2.2UF 50WV		
C16		*	CK73FB1H223K	CHIP C 0.022UF K		
C17		*	C90-0484-05	ELECTR8 0.47UF 50WV		
C18		*	C90-0478-05	ELECTR8 100F 16WV		
C19		*	C90-0831-05	ELECTR8 30F 10WV		
C21		*	CK73FB1H223K	CHIP C 0.022UF K		
C22		*	CK73FR1H100D	CHIP C 10PF D		
C23		*	CK73FB1H103K	CHIP C 0.010UF K		
C24		*	CK73PC1H150J	CHIP C 15PF J		
C25	26	*	C90-0484-05	ELECTR8 0.47UF 50WV		
C27		*	CK73PS1H221J	CHIP C 220PF J		
C30	31	*	C90-0482-05	ELECTR8 4.7UF 25WV		
C32	33	*	CK73FB1H103K	CHIP C 0.010UF K		
C34		*	CK73FB1H223K	CHIP C 2200PF K		
C35		*	CK73FB1H332K	CHIP C 3300PF K		
C36		*	CS15E1A220M	TANTAL 220UF 10WV		
C37		*	C90-0482-05	ELECTR8 4.7UF 25WV		
C38		*	CE04CW1H847M	ELECTR8 1.0UF 50WV		
C39		*	CK73FB1H223K	ELECTR8 0.47UF 50WV		
C40	41	*	CK73FB1H223K	CHIP C 0.022UF K		
C42		*	CK73FB1E153K	CHIP C 0.015UF K		
C43		*	CK73PS1H680J	CHIP C 68PF J		
CN1		*	E40-3397-05	PIN ASSY		
CN2		*	E40-3393-05	PIN ASSY		
W1		*	E31-3571-05	WIRING HARNESS		
CF1	2	*	L72-0145-05	CERAMIC FILTER		
L1		*	L40-4791-16	SMALL FIXED INDUCTOR(4.7UH,K)		
T1		*	L30-0450-05	FM IFT		
X1		*	L78-0208-05	RESONATOR (18.950KHZ)		
-		*	R92-0670-05	CHIP R 0 OHM		
CP1		*	R90-0282-05	COMPOSITE ELEMENTS		
R1	2	*	RK73FB2A104J	CHIP R 100K J 1/10W		
R3	4	*	RK73FB2A101J	CHIP R 100 J 1/10W		
R5		*	RK73FB2A331J	CHIP R 330 J 1/10W		
R6		*	RK73FB2A682J	CHIP R 6.8K J 1/10W		
R7		*	RK73FB2A152J	CHIP R 1.5K J 1/10W		
R8		*	RK73FB2A333J	CHIP R 33K J 1/10W		
R9		*	RK73FB2A471J	CHIP R 470 J 1/10W		

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R10 ,11			RK73FB2A331J	CHIP R 330 J 1/10W		
R13			RK73FB2A273J	CHIP R 27K J 1/10W		
R14			RK73FB2A153J	CHIP R 15K J 1/10W		
R15			RK73FB2A123J	CHIP R 12K J 1/10W		
R16		*	RK73FB2A132J	CHIP R 1.3K J 1/10W		
R20			RK73FB2A223J	CHIP R 22K J 1/10W		
R22			RK73FB2A682J	CHIP R 6.8K J 1/10W		
R23			RK73FB2A473J	CHIP R 47K J 1/10W		
R24			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R27			RK73FB2A512J	CHIP R 5.1K J 1/10W		
R28			RK73FB2A333J	CHIP R 33K J 1/10W		
R29			RK73FB2A222J	CHIP R 2.2K J 1/10W		
R30		*	RK73FB2A100J	CHIP R 10 J 1/10W		
R31			RK73FB2A223J	CHIP R 22K J 1/10W		
R32			RK73FB2A101J	CHIP R 100 J 1/10W		
R33			RK73FB2A223J	CHIP R 22K J 1/10W		
R34			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R36			RK73FB2A473J	CHIP R 47K J 1/10W		
R37 ,38			RK73FB2A223J	CHIP R 22K J 1/10W		
R39			RK73FB2A683J	CHIP R 68K J 1/10W		
R40			RK73FB2A104J	CHIP R 100K J 1/10W		
R41 ,42			RK73FB2A473J	CHIP R 47K J 1/10W		
VR1			R12-1054-05	TRIMMING P8T. (1K) IF GAIN		
VR2 ,3			R12-3071-05	TRIMMING P8T. (10K)SD,ANRC		
VR5			R12-3100-05	TRIMMING P8T. (10K)SBT MUTE		
VR6			R12-3071-05	TRIMMING P8T. (10K)SEPARATION		
VR7			R12-3103-05	TRIMMING P8T. (47K)PILOT CANCEL		
D1 -4			DL51585	DIODE		
D1 -4			RL5-73	DIODE		
D5			DAN202K	DIODE		
IC1			TA7411AP	IC(FM IF)		
IC2			LA2110	IC(FM NOISE CANCELLER)		
IC3			LA343D	IC(FM MPX)		
Q1			DTC124EK	DIGITAL TRANSISTOR		
Q2 ,3			2SC2413K	TRANSISTOR		
Q5			2SC2412K	TRANSISTOR		
267	3D	*	WD2-0708-05	FM FRONT-END ASSY		
CONTROL UNIT (X11-2340-10)						
C1			CC410SL1H470J	CYLND CHIP C 47PF J		
C2			CK73EB1H103K	CHIP C 0.010UF K		
C3			C90-1263-05	ELECTR8 100UF 16WV		
C4			C092M1H563J	MYLAR 0.056UF J		
C5 -8			C092M1H223J	MYLAR 0.022UF J		
C9 ,10			CK41DB1H821K	CYLND CHIP C 820PF K		
C11 ,12			CE04DW1A101M	ELECTR8 100UF 10WV		
C13 -16			C90-0482-05	ELECTR8 4.7UF 25WV		
C17 ,18			CE04DW1E4R7M	ELECTR8 4.7UF 25WV		
C19			CE04DW1A101M	ELECTR8 100UF 10WV		
C20			CE04DW1C100M	ELECTR8 10UF 16WV		
C21			CE04DW1A101M	ELECTR8 100UF 10WV		
C22			CE04DW1A221M	ELECTR8 220UF 10WV		
C23 ,24			C90-0482-05	ELECTR8 4.7UF 25WV		
C25 ,26			C90-0478-05	ELECTR8 10UF 16WV		

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C27			CE04DW1A221M	ELECTR8 220UF 10WV		
C28			CE04DW1A101M	ELECTR8 100UF 10WV		
C30			CE04DW1A101M	ELECTR8 100UF 10WV		
C31 .32			CE04DW1C100M	ELECTR8 10UF 16WV		
C33 .34			CK41DB1H331K	CYLND CHIP C 330PF K		
C35 .36			CE04DW1H0R1M	ELECTR8 0.1UF 50WV		
C37			CE04DW1A221M	ELECTR8 220UF 10WV		
C38			CE04DW1A470M	ELECTR8 47UF 10WV		
C39 .40			CE04DW1H477M	ELECTR8 0.47UF 50WV		
C41 .42			CE04DW1E4R7M	ELECTR8 4.7UF 25WV		
C43			CE04DW1C471M	ELECTR8 470UF 16WV		
C44			CE04DW1A470M	ELECTR8 47UF 10WV		
C45 .46			C90-0482-05	ELECTR8 4.7UF 25WV		
C49 .56			CF92V1H104J	MF 0.10UF J		
C57 .60			CK73EB1H473K	CHIP C 0.047UF K		
C61 .62			CE04DW1C221M	ELECTR8 220UF 16WV		
C63 .66			CE04DW1A101M	ELECTR8 100UF 10WV		
C67 .70			C93-0002-05	CYLND CHIP C 1500PF M		
C71 .74			CE04DW1H010M	ELECTR8 1.0UF 50WV		
C75 .76		*	C90-1438-05	ELECTR8 1500UF 16WV		
C77 .78			C90-1402-05	ELECTR8 470WV 16WV		
C79 .81			CK73EB1H103K	CHIP C 0.010UF K		
CN1			E40-3304-05	PIN ASSY		
CN2		*	E40-3462-05	PIN ASSY		
CN3			E40-3467-05	PIN ASSY		
CN4		*	E40-3301-05	PIN ASSY		
CN5		*	E40-3221-05	PIN ASSY		
CN6			E40-3300-05	PIN ASSY		
CN7		*	E40-3227-05	PIN ASSY		
CN8		*	E40-3223-05	PIN ASSY		
CN9			E40-3463-05	PIN ASSY		
CN10		*	E40-3719-05	PIN ASSY		
W1		*	E31-3922-05	WIRING HARNESS		
W2		*	E31-3767-05	WIRING HARNESS		
W3		*	E31-3768-05	WIRING HARNESS		
W4		*	E31-3921-05	WIRING HARNESS		
W5		*	E31-3575-05	WIRING HARNESS		
J1 .19			R92-0339-05	CYLND CHIP R 0.8HM		
J28		*	R92-0150-05	JUMPER REST 0.8HM		
J45 .46			R92-0339-05	CYLND CHIP R 0.8HM		
R1			RD41DB2B224J	CYLND CHIP R 220K J 1/8W		
R2			RD41DB2B332J	CYLND CHIP R 3.3K J 1/8W		
R3			RD41DB2B221J	CYLND CHIP R 220 J 1/8W		
R4			RD41DB2B122J	CYLND CHIP R 1.2K J 1/8W		
R5 .6			RD41DB2B564J	CYLND CHIP R 560K J 1/8W		
R7 .8			RD41DB2B154J	CYLND CHIP R 150K J 1/8W		
R9 .10			RD41DB2B682J	CYLND CHIP R 6.8K J 1/8W		
R11 .12			RD41DB2B330J	CYLND CHIP R 33 J 1/8W		
R13 .14			RD41DB2B473J	CYLND CHIP R 47K J 1/8W		
R15 .16			RD41DB2B163J	CYLND CHIP R 16K J 1/8W		
R17 .18			RD41DB2B683J	CYLND CHIP R 68K J 1/8W		
R19			RD41DB2B103J	CYLND CHIP R 10K J 1/8W		
R20			RD41DB2B223J	CYLND CHIP R 22K J 1/8W		
R21			RD41DB2B391J	CYLND CHIP R 390 J 1/8W		

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R22 R25 ,26 R27 ,28 R29 ,30 R31 ,32			RD41DB2B103J RD41DB2B122J RD41DB2B181J RD41DB2B103J RD41DB2B153J	CYLND CHIP R 10K J 1/8W CYLND CHIP R 1.2K J 1/8W CYLND CHIP R 180 J 1/8W CYLND CHIP R 10K J 1/8W CYLND CHIP R 15K J 1/8W		
R33 ,34 R35 R36 R37 ,38 R43 ,44			RD41DB2B473J RD41DB2B183J RD41DB2B223J RD41DB2B101J RD41DB2B562J	CYLND CHIP R 47K J 1/8W CYLND CHIP R 18K J 1/8W CYLND CHIP R 22K J 1/8W CYLND CHIP R 100 J 1/8W CYLND CHIP R 5.6K J 1/8W		
R47 ,48 R49 ,50 R51 R52 R53 ,60			RD41DB2B102J RD41DB2B561J RD41DB2H4R7J RD41DB2B473J RD41DB2B2K2J	CYLND CHIP R 1.0K J 1/8W CYLND CHIP R 560 J 1/8W SMALL-RD 4.7 J 1/2W CYLND CHIP R 47K J 1/8W CYLND CHIP R 2.2 J 1/8W		
R61 ,64 R65 ,66 R67 ,70 R71 ,72 R73 ,74			RD41DB2B221J RD41DB2B680J RD41DB2B560J RK73FB2A680J RK73FB2A103J	CYLND CHIP R 220 J 1/8W CYLND CHIP R 68 J 1/8W CYLND CHIP R 56 J 1/8W CHIP R 68 J 1/10W CHIP R 10K J 1/10W		
R75 ,77 R78 R79 VR1 ,2 VR3 VR4			RD41DB2B222J RD41DB2B333J RD41DB2B104J R12-3101-05 R24-9019-05	CYLND CHIP R 2.2K J 1/8W CYLND CHIP R 33K J 1/8W CYLND CHIP R 100K J 1/8W TRIMMING POT. (22K) DISPLAY LEVEL POTENTIOMETER (10K) POWER		
	3C	*	R29-3020-05	POTENTIOMETER (20K) BALANCE		
D1 ,2 D3 ,5 D6 IC1 ,2 IC3			RLS-73 ERA15-D1Y1 V03C AN7171K NR086D	DIODE DIODE DIODE IC (AUDIO PSWER AMP) IC (DBLY)		
IC4 IC5 IC6 IC7 Q1 Q2 Q3 ,4 Q5 ,6			BA3406L AN6262N KC-819 UPC4570C 2S8822F DTC124EK 2SC2412K DTC124EK	IC (PREAMP FOR TAPE EQ X2) IC (T. ADV) IC (TONE AMP X2) IC (6P AMP X2) TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR		
SYNTHESIZER UNIT (X14-2010-10)						
C1 C2 C4 C5 ,6 C7			CE04DSL1H330J CE04DW1A330M CE04DW1E4R7M CE04DW1A470M CE04DW1H0R1M	CYLND CHIP C 33PF J ELECTR9 33UF 10WV ELECTR9 4.7UF 25WV ELECTR9 47UF 10WV ELECTR9 0.1UF 50WV		
C8 C9 ,10 C11 ,12 C13 C14 ,17			C93-0012-05 CK73EB1H333K CK41DB1H681K CE04DW1A470M C93-0012-05	CYLND CHIP C 0.01UF M CHIP C 0.033UF K CYLND CHIP C 680PF K ELECTR9 47UF 10WV CYLND CHIP C 0.01UF M		
C18 C19 ,20 C21 C22			CE04DW1A221M C073FCH1H220J CE04DW1C100M CE04DW1A101M	ELECTR9 220UF 10WV CHIP C 22PF J ELECTR9 10UF 16WV ELECTR9 100UF 10WV		

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C23 -25			CE04DW1A470M	ELECTR0 47UF 10WV		
C26			CE04DW1A471M	ELECTR0 470UF 10WV		
C27			CE04DW1A470M	ELECTR0 47UF 10WV		
C28			CE04DW1A102M	ELECTR0 1000UF 10WV		
C29			CE04DW1A221M	ELECTR0 220UF 10WV		
C30			CE04DW1C102M	ELECTR0 1000UF 16WV		
C31			CE04DW1H2R2M	ELECTR0 2.2UF 50WV		
C32			CK73EB1H223K	CHIP C 0.022UF K		
C33			CE04DW1H0R1M	ELECTR0 0.1UF 50WV		
C34			CE04DW1A101M	ELECTR0 100UF 10WV		
C35			C90-0822-05	ELECTR0 47UF 16WV		
C36			CE04DW1A221M	ELECTR0 220UF 10WV		
C37 -40			CE04DW1A470M	ELECTR0 47UF 10WV		
C41			CE04DW1C100M	ELECTR0 10UF 16WV		
C42 -48			C90-0478-05	ELECTR0 10UF 16WV		
C49			CE04DW1A101M	ELECTR0 100UF 10WV		
CN1			E40-3483-05	PIN ASSY		
CN2			E40-3488-05	PIN ASSY		
CN3		*	E40-3235-05	SOCKET FOR PIN ASSY		
CN4		*	E40-3230-05	SOCKET FOR PIN ASSY		
CN5		*	E40-3231-05	SOCKET FOR PIN ASSY		
CN6			E40-3238-05	PIN ASSY		
CN7			E40-3241-05	PIN ASSY		
CN8			E40-3484-05	PIN ASSY		
W1	20	*	E30-1529-05	CORD WITH PLUG		
W2		*	E31-3923-05	WIRING HARNESS		
W3		*	E31-3795-05	WIRING HARNESS		
L1			L39-0129-05	TRAP COIL		
X1			L77-0585-05	CRYSTAL RESONATOR(4.5MHZ)		
CP1			R90-0450-05	MULTIPLE RESISTOR		
CP2			R90-0254-05	COMPOSITE ELEMENTS		
J1 -21			R92-0338-05	CLYND CHIP R 0.8HM		
J23 -44			R92-0338-05	CLYND CHIP R 0.8HM		
J67			R92-0150-05	JUMPER REST 0.8HM		
J72			R92-0150-05	JUMPER REST 0.8HM		
J83			R92-0150-05	JUMPER REST 0.8HM		
R2			RD41DB2B103J	CYLYND CHIP R 10K J 1/8W		
R3			RD41DB2B273J	CYLYND CHIP R 27K J 1/8W		
R4			RD41DB2B100J	CYLYND CHIP R 10 J 1/8W		
R5			RD41DB2B103J	CYLYND CHIP R 10K J 1/8W		
R6			RD41DB2B102J	CYLYND CHIP R 1.0K J 1/8W		
R7			RD41DB2B473J	CYLYND CHIP R 47K J 1/8W		
R8			RD41DB2B472J	CYLYND CHIP R 4.7K J 1/8W		
R9 .10			RD41DB2B222J	CYLYND CHIP R 2.2K J 1/8W		
R11 .12			RD41DB2B203J	CYLYND CHIP R 20K J 1/8W		
R13 .14			RD41DB2B103J	CYLYND CHIP R 10K J 1/8W		
R15 .16			RD41DB2B223J	CYLYND CHIP R 22K J 1/8W		
R17			RD41DB2B224J	CYLYND CHIP R 220K J 1/8W		
R18			RD41DB2B472J	CYLYND CHIP R 4.7K J 1/8W		
R19 -22			RD41DB2B104J	CYLYND CHIP R 100K J 1/8W		
R23 -26			RD41DB2B103J	CYLYND CHIP R 10K J 1/8W		
R28			RD41DB2B472J	CYLYND CHIP R 4.7K J 1/8W		
R29			RD41DB2B223J	CYLYND CHIP R 22K J 1/8W		

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R31			RD41DB2B152J	CYLND CHIP R 1.5K J 1/8W		
R32			RD41DB2B473J	CYLND CHIP R 47K J 1/8W		
R33			RD41DB2B563J	CYLND CHIP R 56K J 1/8W		
R34			RD41DB2B103J	CYLND CHIP R 10K J 1/8W		
R35			RD41DB2B472J	CYLND CHIP R 4.7K J 1/8W		
R36			RD41DB2B104J	CYLND CHIP R 100K J 1/8W		
R37			RD41DB2B222J	CYLND CHIP R 2.2K J 1/8W		
R38			RD41DB2B104J	CYLND CHIP R 100K J 1/8W		
R39 ,40			RD41DB2B103J	CYLND CHIP R 10K J 1/8W		
R41			RD41DB2B223J	CYLND CHIP R 22K J 1/8W		
R42			RD41DB2B222J	CYLND CHIP R 2.2K J 1/8W		
R43			RD41DB2B477J	CYLND CHIP R 4.7 J 1/8W		
R44 ,45			RD41DB2B472J	CYLND CHIP R 4.7K J 1/8W		
R46			RD41DB2B102J	CYLND CHIP R 1.0K J 1/8W		
R47 ,48			RD41DB2B473J	CYLND CHIP R 47K J 1/8W		
R50			RD41DB2B562J	CYLND CHIP R 5.6K J 1/8W		
R51			RD14DB2H477J	SMALL-RO 4.7 J 1/2W		
R52			RD41DB2B102J	CYLND CHIP R 1.0K J 1/8W		
R53			RD41DB2B223J	CYLND CHIP R 22K J 1/8W		
R54			RD41DB2B222J	CYLND CHIP R 2.2K J 1/8W		
R55			RD41DB2B103J	CYLND CHIP R 10K J 1/8W		
R56			RD41DB2B562J	CYLND CHIP R 5.6K J 1/8W		
R57 ,58			RD41DB2B152J	CYLND CHIP R 1.5K J 1/8W		
R59			RD41DB2B103J	CYLND CHIP R 10K J 1/8W		
R60 -62			RD41DB2B102J	CYLND CHIP R 1.0K J 1/8W		
R63			RD41DB2B473J	CYLND CHIP R 47K J 1/8W		
R64			RD41DB2B103J	CYLND CHIP R 10K J 1/8W		
R66			RD41DB2B101J	CYLND CHIP R 100 J 1/8W		
R67 ,68			RD41DB2B153J	CYLND CHIP R 15K J 1/8W		
R69 -72			RD41DB2B332J	CYLND CHIP R 3.3K J 1/8W		
R73			RD41DB2B222J	CYLND CHIP R 2.2K J 1/8W		
R74			RD41DB2B103J	CYLND CHIP R 10K J 1/8W		
R75			RS14DB3D151J	FL-PROOF RS 150 J 2W		
R76			RD41DB2B104J	CYLND CHIP R 100K J 1/8W		
R77			RD41DB2B222J	CYLND CHIP R 2.2K J 1/8W		
VR1			R12-3096-05	TRIMMING PBT. (10K) 50P LEVEL		
D1			DSP-301N	SURGE ABSORBER		
D2 -8			RLS-73	DIODE		
D9 -12			1S1555	DIODE		
D13 -34			RLS-73	DIODE		
D35			1S1555	DIODE		
D36 -39			RLS-73	DIODE		
D40			RLZJ6.2	ZENER DIODE		
D41			RLZJ10	ZENER DIODE		
D42			RLZJ6.2	ZENER DIODE		
D43 ,44			ERA15-Q1Y1	DIODE		
IC1			UPD1708G-637-00	IC(DIGITAL TUNING SYSTEM)BNT		
IC2 -4			TC40B1BP	IC(AND X4)		
IC2 -4			UPD40B1BC	IC(AND X4)		
IC5			KC-850	IC(ISOLATION AMP)		
O1			2SC2412K	TRANSISTOR		
O2			DTC124EK	DIGITAL TRANSISTOR		
O3 ,4			DTA144EK	DIGITAL TRANSISTOR		
O5			DTC124EK	DIGITAL TRANSISTOR		

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Q6 Q7 Q8 ,9 Q10 Q11			25B822F 25D1055F 25C2412K 25B1015 25C2412K	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
Q12 Q13 Q14 ,15 Q16 Q17 ,18			25A1037K 25D1055F 25C2412K(S) DTC124EK 25D1328	TRANSISTOR TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR		
Q17 ,18 Q19 Q20 Q21 Q22		*	25D1757K DTC124EK DTC124XK 25B822F DTC124EK	TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR		
275	3D		W02-0681-05	TUNER ASSY		
<b>COMPOUND ASS'Y UNIT (X90-2440-10)</b>						
283	1C	*	B07-1732-03	ESCUTCHEON ASSY		
288	1C		F39-0021-03	REINFORCING PLATE		
-			H25-0117-04	PROTECTION BAG (BOX250X0.07)		
W	1C		N09-1344-05	TAPTITE SCREW (Ø2X4)		
PL1	1C	*	B30-1135-15	LAMP (R)		
PL2	1C	*	B30-1125-15	LAMP (L)		
CN1		*	E40-0287-05	PIN ASSY		
<b>TUNER ASS'Y (W02-0681-05)</b>						
D1 -3 D1 -5 FET1 FET1 IC1			SVC321 15V149 25K163 25K523 LA1135	DIODE DIODE FET FET IC(AM)		
TR1 -3 TR1 -3 TR1 -3			25C2619 25C2716 25C2814	TRANSISTOR TRANSISTOR TRANSISTOR		
<b>FM FRONT-END ASS'Y (W02-0708-05)</b>						
FET1 TR1 TR2 TR2 TR3		*	35K101 25C2620 25C2175 25C2714 25C2995	FET TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
<b>SCREW SET (N99-0066-15)</b>						
-			N09-0334-05	SCREW (M5X8)		
-			N09-0335-05	SCREW (M5X16)		
-			N09-0366-05	SCREW (M5X20)		
-			N10-1050-46	HEXAGON NUT		
-			N14-0131-05	NUT		
-			N19-0337-05	FLAT WASHER		
<b>CASSETTE MECHANISM ASS'Y (D40-0391-05)</b>						
3	1B		A53-0674-08	CASSETTE HOLDER		

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9	3B		D03-0241-08	REEL DISK ASSY		
10	2B, 3B		D01-0073-08	FLYWHEEL ASSY		
11	3A		D03-0229-08	SLIDER ASSY (MAIN GEAR)		
12	2B		D10-1319-08	SLIDER ASSY (SWITCHING)		
13	2B		D10-1321-08	LEVER (TRIGGER STOP)		
14	2B		D10-1322-08	ARM (FF REW LSCK)		
15	2B		D10-1323-08	SLIDER (FF REW)		
16	2B		D10-1324-08	LEVER (FF REW SP)		
17	2A		D10-1651-08	ARM		
18	2A		D10-1326-08	SLIDER (TAKE UP GEAR PUSH)		
19	2B		D10-1328-08	ARM (PINCH ROLLER SP)		
20	3A		D10-1329-08	SLIDER ASSY (FF GEAR)		
21	3A		D10-1330-08	SLIDER ASSY (REW GEAR)		
22	3B		D10-1331-08	ARM (END DETECT, F)		
23	3A		D10-1332-08	ARM (END DETECT, R)		
24	3B		D10-1333-08	SLIDER ASSY (TAKEUP GEAR, F)		
25	3A		D10-1334-08	SLIDER ASSY (TAKEUP GEAR, R)		
26	3A		D10-1335-18	SLIDER (END SENSOR)		
27	3A		D10-1336-08	ARM (TRIGGER)		
28	1A		D10-1337-08	LEVER (SW SP)		
29	2A		D10-1338-08	SLIDER ASSY (PUSH)		
30	2A		D10-1340-08	LEVER (LIFT UP)		
31	1B		D10-1652-08	BRACKET ASSY (FF/REW)		
32	1B		D10-1654-08	LEVER (REW)		
33	1B		D10-1653-08	LEVER (FF)		
34	1B		D10-1344-08	SLIDER (FRNG CHANGE)		
35	1B		D10-1345-08	CASE LIFTER		
36	1A		D10-1346-08	SLIDER ASSY (PACK EJECT)		
37	1A		D10-1347-08	SLIDER (CASE DETECT)		
38	2A		D10-1348-08	LEVER (TIMING)		
39	2A		D10-1349-08	ARM (TAKEUP GEAR SP)		
40	3A		D10-1350-08	ARM (STOP)		
41	1B		D10-1530-08	SLIDER (MAIN)		
42	2B		D10-1531-08	ARM (FF/REW RELEASE)		
43	3B		D10-1532-08	HEAD PANEL ASSY		
44	2A		D10-1533-08	SLIDER ASSY (KEY OFF)		
45	2A		D10-1534-08	PLUNGER (KEY OFF)		
46	2A		D10-1535-18	SLIDER (TRIGGER ARM)		
47	2A		D10-1536-18	SLIDER ASSY (HALF/HEAD PUSH)		
48	3B		D13-0185-08	GEAR ASSY (FF)		
49	3A, 3B		D13-0186-08	GEAR (TAKEUP)		
50	3A		D13-0187-10	GEAR (FF TAKEUP)		
51	3A		D13-0188-08	CLUTCH ASSY (FF/REW)		
52	3A		D13-0189-18	GEAR (DEVICE, UPPER)		
53	3A		D13-0190-18	GEAR (DEVICE, BOTTOM)		
54	3A		D13-0191-08	GEAR (DEVICE TRIGGER/STOP)		
55	2A		D13-0192-08	GEAR (TRIGGER/STOP SP)		
56	2A		D13-0193-08	GEAR (INVERTER)		
57	2A		D13-0194-08	REEL DISK ASSY (TAKEUP)		
58	2B		D13-0331-18	GEAR (MAIN)		
59	2A		D13-0309-08	GEAR (KEY OFF, CAM)		
60	2B		D14-0114-08	PINCH ROLLER ASSY (F)		
61	2A		D14-0115-08	PINCH ROLLER ASSY (R)		
62	3B		D14-0131-08	IDLER (HEAD PANEL)		
63	2B	*	D15-0228-18	PULLEY (INTER MEDIATE)		

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64	1B		D13-0332-08	GEAR		
65	3B		D16-0109-18	BELT (MAIN)		
66	1A		D40-0349-08	MECHANISM ASSY (KEY OFF)		
75	2B		G01-1560-08	TENSION SPRING (FF/REW LOCK)		
76	2B		G01-1561-08	TORSION COIL SPRING (CNTRL)		
77	2B		G01-1562-08	TORSION COIL SPRING (TRGR/STOP)		
78	3A		G01-1564-18	TENSION SPRING (FF/REW GEAR)		
79	3B		G01-1565-08	TENSION SPRING (TAKEUP GEAR)		
80	2A		G01-1566-08	TENSION SPRING (TRIGGER STOP)		
81	2A		G01-1567-08	COMPRESSION SPRING (END DETECT)		
82	2A		G01-1740-08	TENSION SPRING (HALF/HEAD PNL)		
83	2A		G01-1571-08	TENSION SPRING (LIFT UP LEVER)		
84	1B		G01-1572-08	TENSION SPRING (FF/REW LEVER)		
85	1A		G01-1573-08	TORSION COIL SPRING (INVERTER)		
86	1B		G01-1574-08	TENSION SPRING (CASSET DETECT)		
87	2A		G01-1575-08	TENSION SPRING (TIMING LEVER)		
88	2B		G01-1734-08	TENSION SPRING (FF RELEASE ARM)		
89	3B		G01-1735-08	TENSION SPRING (HEAD PANEL)		
90	1A		G01-1736-08	TENSION SPRING (POWER SWITCH)		
91	2A		G01-1737-08	TORSION COIL SPRING (KEY OFF GEAR)		
92	2A		G01-1738-08	TORSION COIL SPRING (KEY OFF)		
93	1A		G01-1739-08	COMPRESSION SPRING (PLUNGER)		
94	2A		G01-1569-08	TENSION SPRING (PUSH LEVER)		
96	2B		G02-0174-08	FLAT SPRING (PB HEAD)		
97	2B		G09-0047-08	FORMED WIRE (HEAD SW)		
98	2B		G09-0048-08	FORMED WIRE (FF/REW SP)		
99	2B		G09-0049-08	FORMED WIRE (PINCH ROLLER)		
100	3A		G09-0050-08	ROD (END SENSOR PUSH)		
101	1A		G09-0051-08	FORMED WIRE (PACK EJECT)		
102	1A		G13-0167-08	CUSHION		
103	3A		G16-0112-08	SHEET (SLIP)		
110	2B		J19-2560-08	BRACKET (PLUNGER)		
111	2B		J25-5588-08	PRINTED WIRING BOARD (HEAD)		
112	1A		J32-0306-08	BOSS		
113	1A		J25-4671-08	PRINTED WIRING BOARD (BASE)		
114	2A		J31-0242-08	COLLAR (INVERTER GEAR)		
115	2A		J31-0243-08	COLLAR (END DETECT)		
116	2B		J90-0149-08	GUIDE (TAPE)		
117	1A		J90-0150-18	SLIDER (PACK)		
125	2B		L90-0001-08	COIL ASSY (T)		
126	2B		L92-0015-08	CORE		
139	2A		N19-1020-08	FLAT WASHER		
139	2B		N19-1015-08	FLAT WASHER		
140	3A, 2B		N19-0894-08	FLAT WASHER		
141	2B		N19-0895-08	FLAT WASHER (FLYWHEEL)		
142	2B		N19-0896-08	FLAT WASHER (REEL ASSY, LOCK PLT)		
143	2A, 2B		N19-0897-08	FLAT WASHER (PINCH ROLLER ASSY)		
144	3A		N19-0898-08	FLAT WASHER (GEAR 59)		
145	1B		N19-0899-08	FLAT WASHER (PC PLATE 91)		
146	2A, 2B		N19-0901-08	FLAT WASHER		
147	1A		N19-0941-08	WASHER (Ø3.6XØD. 2)		
148	2A, 2B		N19-0942-08	FLAT WASHER (Ø1.55XØ3.5XØ. 5)		
149	1B		N29-0082-08	E TUPE RETAINING RING (Ø1.5)		

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150	2A, 3B		N24-3012-46	E TYPE RETAINING RING(Ø1.2)		
151	1A		N24-3015-46	E TYPE RETAINING RING(Ø1.5)		
152	2A, 1B		N24-3020-46	E TYPE RETAINING RING(Ø2)		
153	2A		N24-3025-45	E TYPE RETAINING RING(Ø2X5)		
A	2B		N09-1402-08	SCREW (COLLER)		
C	2B		N09-1404-08	SCREW (M2X5) TAPE GUIDE 31		
D	2A, 2B		N09-1740-08	SCREW (M2X2.5) MOTOR TIMING LVR		
E	2B		N09-1406-08	SCREW (M2X4) PB HEAD 33		
F	2A, 2B		N09-1407-08	SCREW (Ø2X3) PM BRCKT 70, PCB 20		
G	3A		N09-1408-08	SCREW (M2X3.5) MG PLT ASY 40		
H	1A, 1B		N09-1409-08	SCREW (Ø2X4) LIFTER 93, BRCKT 88		
P	2B		N09-1294-05	SCREW (Ø2X6)		
Q	1A		N09-1525-08	SCREW (Ø2X2.5)		
R	1B		N09-1643-08	SCREW (M2, 6X4.5)		
Y	1A	*	N09-1403-08	SCREW (M1.7X3.5)		
S1	2A		S46-1081-05	LEAF SWITCH (MUTING)		
S20	2B	*	S31-3006-08	SLIDE SWITCH		
160	2B	*	T31-0040-08	PLAYBACK HEAD		
161	1B		T42-0090-18	DC MOTOR ASSY		
162	1A		T94-0089-08	SSLENGID		

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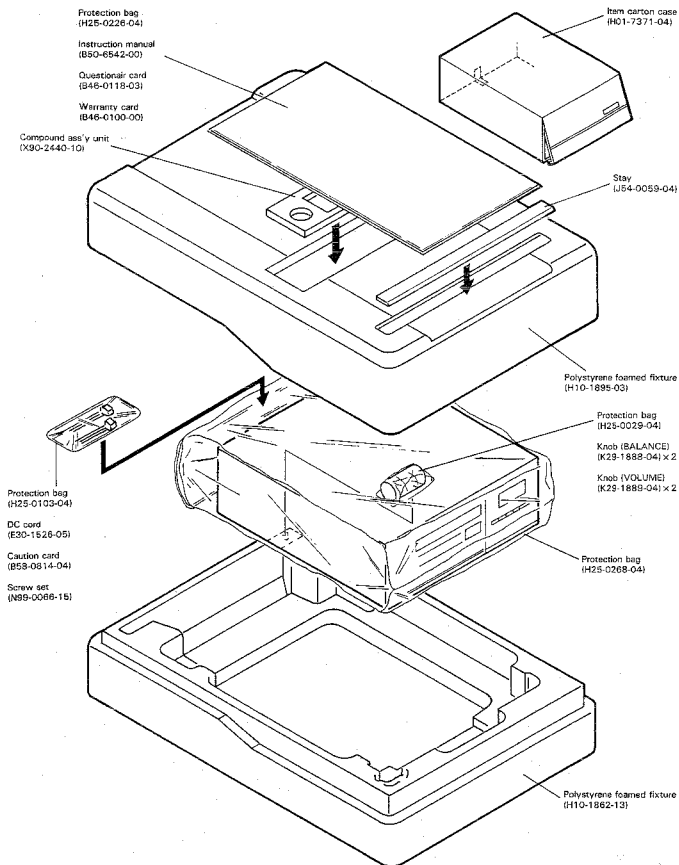
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## PACKING



## SPECIFICATIONS

### FM Tuner Section

Frequency Range (200 kHz space) .....	87.9 MHz ~ 107.9 MHz
(50 kHz space) .....	87.5 MHz ~ 108.0 MHz
Channel Space .....	200 kHz/50 kHz
Usable Sensitivity .....	15.3 dBf (1.6 $\mu$ V/75 ohms)
50 dB Quieting Sensitivity .....	19.0 dBf (2.4 $\mu$ V/75 ohms)
Frequency Response ( $\pm 3$ dB) .....	30 Hz ~ 15 kHz
Signal to Noise Ratio .....	70 dB
Alternate Channel Selectivity .....	65 dB
Capture Ratio .....	1.5 dB
Image Response Ratio .....	65 dB
IF Response Ratio .....	70 dB
Stereo Separation (1 kHz) .....	40 dB

### AM Tuner Section

Frequency Range (10 kHz space) .....	530 ~ 1,620 kHz
(9 kHz space) .....	522 ~ 1,611 kHz
Channel Space .....	10 kHz/9 kHz
Usable Sensitivity (30 $\mu$ V) .....	30 dB

### Cassette Deck Section

Tape Speed .....	4.76 cm/s
Wow and Flutter .....	0.12% (WRMS)
Fast Winding Time (C-60) .....	110 sec
Frequency Response (120 $\mu$ s) .....	40 Hz ~ 14 kHz ( $\pm 3$ dB)
(70 $\mu$ s) .....	40 Hz ~ 16 kHz ( $\pm 3$ dB)

Stereo Separation (1 kHz) .....	37 dB
Signal to Noise Ratio (IEC-A)	
NR OFF .....	55 dB
Dolby B ON .....	64 dB

### Audio Section

Maximum Power Output	
(1 kHz, 4 ohms) .....	20 W + 20 W
Rated Output Power	
(10% THD, 1 kHz, 4 ohms) .....	15 W + 15 W
(1% THD, 30 Hz ~ 20 kHz, 4 ohms) .....	10 W + 10 W

Tone Action .....	Bass: 100 Hz $\pm 10$ dB
	Treble: 10 kHz $\pm 10$ dB
Preamp Output .....	300 mV/10 k ohms Load
1 V/10 k ohms Load	

### General

Operating Voltage (GND) .....	14.4 V (11 ~ 16 V)
Current Consumption .....	7.5 A at Rated Power
Body Size (W x H x D) .....	180 x 50 x 140 mm
	(7-1/16 x 2-15/16 x 5-1/2 in.)
Weight .....	1.8 kg (4.0 lb)

Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Kenwood poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

## KENWOOD CORPORATION

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### KENWOOD ELECTRONICS

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